

# BIRDS OF ANDAMAN & NICOBAR ISLANDS



B. K. TIKADER

The Andaman and Nicobar groups of tropical islands lying in the Bay of Bengal have tantalized casual bird watchers and seasoned ornithologists alike by the wealth and diversity of their avifauna ever since scientific bird study took root in India around the middle of the 19th century. Many of the most unique and beautiful birds are to be found in these oceanic islands. The isolation of these islands from the mainland has been responsible for high degree of endemism and out of 242 species and subspecies of birds reported from these islands, 95 are endemic.

Dr. B. K. Tikader has devoted more than three decades in studying animals and birds in natural environment and scientific investigation. His studies mainly on Spiders and Scorpions of India have come out in a series of papers. He has also published three volumes of Fauna of India on Spiders and Scorpions (1980, 1982 and 1983). Recently he has extended his interest on wildlife and nature conservation problems. Very recently (1983) he has published a book on "Threatened Animals of India" which was an outcome of his wildlife conservation ideas and their implementation.

This book "Birds of Andaman and Nicobar Islands" will help to further interest in this fascinating subject on oceanic birds of these islands and their protection and conservation, among our young readers. The author has provided in this book, colour illustrations of mainly the endemic, migratory and some beautiful species of birds.

For anyone interested in avifauna of these islands, this is an enthralling and informative book. The author has dealt with various aspects of these islands as well as avifaunal informations.

Front cover : PIED IMPERIAL PIGEON : An endemic bird of these islands, symbolising our Nation's philosophy of peace and prosperity.

Back cover : WHITEBELLIED SEA EAGLE : A majestic and powerful bird of prey, symbolising our Nation's self-confidence and integrity.

Background : Deep blue, symbolising the colour of sea; PIED IMPERIAL PIGEON and WHITEBELLIED SEA EAGLE Inhabiting the Andaman and Nicobar Islands which are surrounded by the blue water of Bay of Bengal.

Cover theme and design by Dr. B. K. Tikader

**BIRDS  
OF  
ANDAMAN & NICOBAR  
ISLANDS**

**B. K. TIKADER**

*with a foreword by Dr. Salim Ali,  
Bombay Natural History Society*



**ZOOLOGICAL SURVEY OF INDIA**

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*Mahasaptami*  
1st October, 1984  
Calcutta

	Price
Indian	Rs. 120/00
Foreign	\$ 24/00
	£ 16/00

Published by the Director  
Zoological Survey of India, Calcutta-700 012

Printed in India by  
The Radiant Process Private Limited, Calcutta

**TO ALL BIRD LOVERS  
AND  
MY FRIENDS, THE BEAUTIFUL BIRDS OF INDIA**



## FOREWORD

The Andaman and Nicobar groups of tropical islands lying in the Bay of Bengal have tantalized casual bird watchers and seasoned ornithologists alike by the wealth and diversity of their avifauna ever since scientific bird study took root in India around the middle of the 19th century. The geographical position of the islands and the vast stretch of open sea which sequesters them from the Asiatic mainland gives them their oceanic character and is responsible for the abundance of endemic species of plants and animals to be found on them. The meagre collections of zoological and botanical materials from a few of the more accessible islands have given ample indication of the potential of the wealth and diversity of the bird life that lies hidden in the magnificent untrod forests on the hundreds of other islands, big and small, lying scattered in the archipelagos, difficult to explore without adequate water transport. It is on account of the crippling logistics that so little ornithological work has been done, or is possible, on the islands most of which, moreover, are steep-sided and lacking in landing facilities and fresh water — therefore uninhabited and still in their primeval state. What little exploration has been done during the last one hundred and fifty years or so was rather haphazard and unmethodical. Nevertheless, off and on, and piece by piece, a modicum of knowledge has been built up, sufficient to whet the appetite and to serve as a base-line for further study. Unfortunately the little information available was scattered over a wide range of periodicals and learned scientific journals not easily procurable by the interested layman. This is the first attempt to consolidate material on the avifauna of these islands from diverse sources by Dr. B. K. Tikader. It is, therefore, cheering to find this useful compilation from the published literature available in the well-stocked library of the Zoological Survey of India and others, plus Dr. Tikader's personal observations. By publishing it in book form the author has rendered a valuable service to groping ornithologists. Being himself a distinguished zoologist and head of the ZSI, with the advantage of the relevant bibliography and expert advice at his elbow, this well illustrated book is sure to be welcomed by all resident as well as visiting students of birds. I am sure that this publication will be of great value and use to all concerned and particularly the interested students and naturalists on ornithology of these oceanic islands.

Bombay, August 4, 1984

A handwritten signature in dark ink, appearing to read 'Salim Ali'. The signature is fluid and cursive, with a prominent 'S' and 'A'.

Salim Ali

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## PREFACE

The Andaman and Nicobar Islands, comprising 324 large and small islands and covering an area of 8,300 sq km, are unique in their avifauna. The isolation of these islands from the mainland, has been responsible for high degree of endemism and as many as 242 species and subspecies of birds are exclusive to these islands. With regard to the flora and fauna, a large number of species are common between these islands and mainland India, Burma and Malaysia. Blyth (1846) was the first to have published a list of birds of these islands on the basis of the collections made by Mr Barbe and Captain Lewis from the Nicobars and later (1863), he appended a list of birds of the Andamans in Mouat's "Adventures and Researches among the Andaman Islands" Subsequently, a number of scientists, including those from the Zoological Survey of India, conducted several faunistic surveys and enhanced our avifaunistic knowledge of these islands. It may not be out of place to mention that Mr Humayun Abdulali of the Bombay Natural History Society, conducted extensive surveys to study the birds of these islands and published a number of papers.

While there are many scientific contributions based on the study of the birds of different islands, there is no comprehensive book on birds of the entire range of these islands. In this present book, I have tried to bring together all the information on the avifauna of this group of islands and have also supplemented it with my own observations made during a number of surveys. The book is brought out with the aim and objective to stimulate interest in the study, observation and conservation of the avifauna of these islands. The conservation and protection is dependent upon the conservation of the ecology and environment and due emphasis has been given to these aspects by the Zoological Survey of India, the Botanical Survey of India and the Department of Environment, Government of India, and a number of Wildlife Sanctuaries, National Parks and Biosphere Reserves have been established under the administrative authority of the Andaman and Nicobar Islands. This book, I hope will create consciousness amongst the authorities and general public about the importance of the unique nature of the avifauna and need for its protection. It will also make further study of the birds easier and may lead to discovery of some other species which have so far not been reported from these islands.

The book contains information on 242 species and subspecies of birds, so far known from these islands together with the paintings of 52 set in their ecological habitats. These paintings are mainly of the endemic, migratory and some beautiful species of birds. The species of birds which were introduced to these islands from the mainland have not been included here. They are the Indian Myna *Acridotheres tristis tristis* (Linnaeus), Indian House Sparrow *Passer domesticus indicus* Jerdine and Selby, the Common Peafowl *Pavo cristatus* Linnaeus and the South Indian Grey Partridge *Francolinus pondicerianus pondicerianus* (Gmelin).

In this book the species so far recorded from these islands are described with a serial number listed in an alphabetical order. In the main text, the nominate subspecies are correlated with a number of other subspecies recorded elsewhere outside the Andaman and Nicobar Islands. The subspecies from the islands are, however, described in detail and some are illustrated. I have also included in this book a two-colour map of these islands as well as some colour photographs of different types of forests on these islands.

*Mahasaptami*  
*1st. October 1984*  
*Calcutta*

**B. K. TIKADER**  
*Director*  
Zoological Survey of India

## ACKNOWLEDGEMENTS

I am deeply indebted to Dr. Salim Ali, who stands out as a phenomenon in the Indian Scene as an outstanding ornithologist and conservationist, and whose monumental work on Indian Birds has virtually inspired me to write this book on "Birds of Andaman and Nicobar Islands". Due to his keen interest, he spared his valuable time at his venerable old age and was kind enough to go through the manuscript and to write a foreword to adorn this book.

I express my deep sense of gratitude to Dr. T. N. Khoshoo, Secretary, Department of Environment, Government of India, for his personal interest and inspiration which I have received all the time and it is only due to his constant support that I have been able to write quite a number of books including this one.

Thanks are due to Dr. A. K. Mukherjee, Emeritus Scientist, Zoological Survey of India who helped me initially in preparing the base data information and list of the birds of these islands. Thanks are also due to my colleagues, Dr. V. C. Agrawal, Dr. Ashok K. Das, Shri P. K. Das, Dr. R. K. Ghose and Shri Subhendu S. Saha of the Zoological Survey of India for assisting me in various ways during the preparation of this book. I am thankful especially to Shri J. M. Dasgupta, who tirelessly worked with me for the completion of this book and it would not have been possible for me to achieve this target in time without his help. The colour pictures which I have used in this book were prepared by Shri Sitaram Mandal and Shri Sudhendu Kumar Chanda, Artists of this Department and the typing of the manuscript was done by Shri Anil Kumar Bhattacharjee, Senior Stenographer and Shri A. B. Sarkar to whom I convey my thanks.

Thanks are also due to Prof. Arun Kumar Sharma, Professor of Botany, University of Calcutta, Prof. Amalesh Chowdhury, Professor of Marine Science, University of Calcutta and Prof. Sivatosh Mookerjee, Professor of Life Science, Jawaharlal Nehru University, New Delhi for their constructive suggestions for improvement.

I must thank Shri M. L. Kampani, Lt. Governor and Shri Sakti Singh, Deputy Commissioner of Andaman and Nicobar Islands for various help and encouragement and to Shri Humayun Abdulali, Bombay Natural History Society, whose recent study on avifauna of these islands, helped me in preparation of this book. I also wish to thank Dr. K. C. Jayaram, Dr. A. K. Ghosh, Dr. O. B. Chhotani, Shri Bhanu Sinha, Shri Biswanath Roy, Zoological Survey of India and my son, Shri Shyamal Tikader who readily helped me in various ways.

I must thank the Directors of The Radiant Process Private Limited, namely, Shri Nirad Baran Mukherjee and Shri Sudhir Chandra Mukherjee and their working staff who were engaged in printing this book. My thanks are also due to Shri Nirmal Banerjee, who worked tirelessly in preparing layout of this book. I

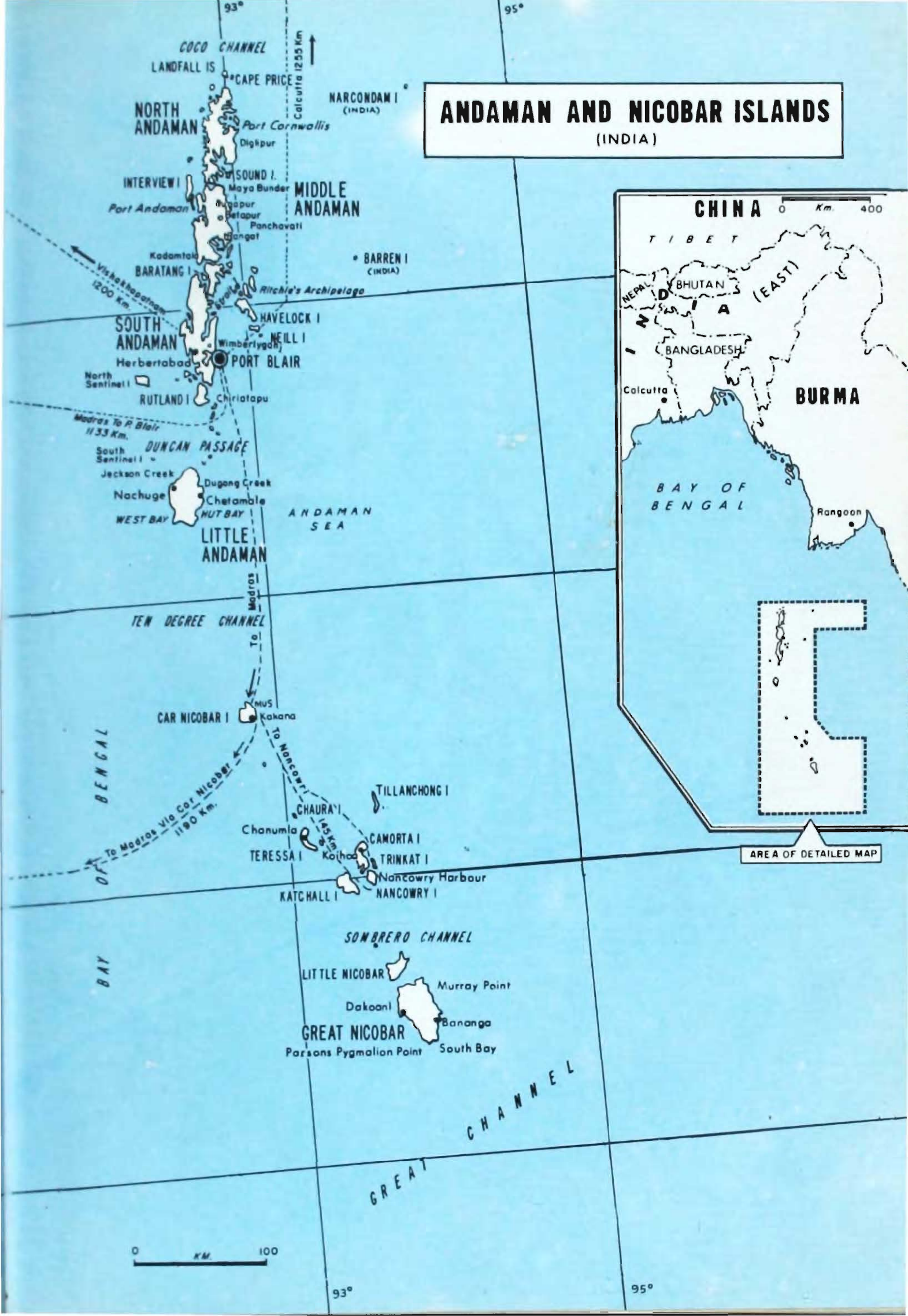
am also thankful to Shri G. Sivagurunathan, Publication Production Officer Zoological Survey of India, for his constant supervision of publication and printing work of this book and sustained efforts to keep the deadline of publication.

I also thank Dr M. P Nayar Director and Dr N. P Balakrishnan, Deputy Director Botanical Survey of India and Dr H. M. Kapur and Dr A. K. Datta, Geological Survey of India, Calcutta, for kindly going through the physiography chapter and offering valuable suggestions.

Last but not the least I am thankful to Prof M. S. Mani, Retired Scientist, Zoological Survey of India, Madras, Dr Biswapati Dasgupta, Principal, Government College, Darjeeling and Dr Biswamoy Biswas, eminent ornithologist and Emeritus Scientist, Zoological Survey of India, for kindly going through the manuscript and offering valuable suggestions, and to my friends, Shri J. C. Daniel, Curator Bombay Natural History Society for sending me bird collection from Andaman and Nicobar Islands for my study, and Shri N. S. Chakravarthy, Chief Engineer Posts and Telegraphs and my next door neighbour for his manifold help during the preparation of this book.

Before I conclude I would like to thank my wife, Smt. Mridula Tikader but for whose unrelenting indulgences and patience with me, this book would never have made its journey to the press.

# ANDAMAN AND NICOBAR ISLANDS (INDIA)





*Andaman moist deciduous forests*

## PHYSIOGRAPHY OF THE ANDAMAN AND NICOBAR ISLANDS

The far south-eastern region of the Bay of Bengal presents tropical and evergreen sprinkles of land in the form of a cluster of islets and larger islands, which rise from the deep blue waters of the sea, interrupting the immense expanse of the Indian Ocean. The archipelago comprises clusters of several hundred islands known as the Andaman and Nicobar Islands, which extend over 800 km in the sea. These islands were once a part of the Asian mainland but got detached millions of years ago in the post-Cretaceous period due to geological upheaval. The island chain now constitutes the physiographic continuation of the mountain ranges of Naga and Lushai Hills and Arakan Yoma of Burma through Cape Negrais to the Andaman and Nicobar Islands and south-east to Sumatra (Achin head). The chain of these islands is in fact the camel-backs of the submerged mountain range, running north to south between  $6^{\circ}45' N$  and  $13^{\circ}30' N$  and  $92^{\circ}20' E$  and  $93^{\circ}56' E$ . The total landmass is approximately 8249 sq km.

The Andaman and Nicobar Islands are broadly divisible into three groups *viz.*, (i) Andaman group (ii) Nicobar group and the (iii) Volcanic island group, consisting of the Narcondam and Barren Islands. The last group does not fall within the described meridian but has been included broadly in the archipelago for administrative convenience under the Government of India. The Andaman and Nicobar groups are separated by the Ten-degree Channel which is about 150 km wide and 400 fathoms deep.

The Andaman group comprises 324 islands, of which 204 are named but only 20 are inhabited. The main stretch, collectively known as the Great Andamans, consists of five closely adjoining islands, *viz.*, North Andaman, Middle Andaman, South Andaman, Baratang Island and Rutland Island. All these are separated by narrow channels. The Great Andaman group covers a land area of 6408 sq km. The southernmost island of the Andaman group is the Little Andaman, which is separated from the Great Andaman by the Duncan Passage and from the Nicobar group by the Ten Degree Channel. This island is 48 km long and 27 km wide and the land area is about 960 sq km.

The Nicobar group comprises about twenty-two islands, large and small, of which 13 islands are inhabited. The total land mass is 1841 sq km. The distance between Car Nicobar and the Pygmalion point of the southernmost island (Great Nicobar), is 310 km. This point is in fact the southernmost limit of India and is 1850 km from Calcutta. Of all the islands of Nicobar group, the Great Nicobar is the largest, having an area of nearly 1045 sq km., with a length of 55 km between Murray point in the north and Pygmalion point in the south. This point is only 144 km distant from the Achin Head of Sumatra (Indonesia). Other important island of the group is Car Nicobar which is the Head-quarters of the group. This is a coral island and has a shape more or less of that of Australia and has a land area of 126.9 sq km., other islands worth mentioning are Chaura, Tillanchong, Kondul, Teressa, Pulomilo, Camorta, Trinkat, Nancowry, Katchall,

and Little Nicobar. Most of these islands are fertile and support evergreen vegetation specially clusters of coconut palms that bear green fans waving high above the slim bare trunks against the blue sky.

## GEOLOGICAL HISTORY

The Andaman and Nicobar groups of islands belong to a geosynclinal basin. The sediments of this region gradually change their characters, due to tectonic movements to which they have been subjected to, from time to time; as such the rocks are highly folded.

Six distinct geological formations, consisting of various groups of rocks, form these islands. These formations include Older Sedimentaries, Ophiolite Suite (with basic and ultrabasic intrusives), Mithakhari Group, Andaman Flysch, Archipelago 'Series' and the Rultand Sheel Limestone. They represent a period of sedimentation, from Cretaceous (about 100 million years) to sub-recent (less than 10,000 years). The surface deposits of gravel beds and raised soil covers, on the other hand, are of very late origin i.e., Recent to sub-Recent (i.e., less than 10,000 years).

The Older Sediments of Mesozoic formed the basement for younger deposits. The history of the later deposition is that of an inconsistent basin i.e., associated with movement, volcanism and deposition, side by side with igneous intrusions. Over the Older Sediments, at the deeper part of the sea bottom, there was rich accumulation of siliceous tests of Radiolarians, possibly drifted from nearby place. This was followed by intricate subsidence and deposition of sediments of Late Cretaceous to Oligocene (consisting of group of rocks of Mithakhari Group, Andaman Flysch, Archipelago 'Series'). During Oligocene, the island area faced a tremendous earth movement resulting in mountain ridges, although well within the sea. Some of the ridges were suited for the growth of corals leading to the rising tendency for developing the reef islands. The formation of Rut Island (West Coral Reef, Middle Coral Reef, Chaura Coral Reef, Sambrallo Channel Coral Reef, Car Nicobar Coral Reef) in this region are attributed to these and also to the deposition of limestone.

The present configuration of these islands took shape only about 26 million years ago. Two of the islands, Narcondam and Barren Islands are of Volcanic origin. The former is an apparently extinct volcano, while the latter is still active.

## SOIL

The soil cover is more or less thin, varying between two and five metres in the hilly tracts. Aluvial soil is found on top of the ridges and diluvial soil covers the blocks of the ridges and valleys. Thick alluvial soil (30-50 m) is formed along the river courses. Coastal flats are admixture of sand, silty clay and diluvial material together with fine fragments of coral lime. The soil, in general, is mild to moderately acidic, with appreciably high humus on top.

## CLIMATE

The climate in the groups of islands is tropical, that is, warm moist and equable. The proximity of the sea and the abundant rainfall prevent extremes of heat. The mountainous parts of the southern islands get about 300 cm of rain annually, whereas the islands in the north get lesser rainfall. Winter is practically unknown, the period from December to February is comparatively cool due to effect of the northeast monsoon. Warm weather extends from March to April when there is the least precipitation. In May south-west monsoon breaks over the area and continues till the end of October

The variation of temperature over the islands is small ( $23^{\circ}$  –  $31^{\circ}$  centigrade). The range of mean temperature in the year is about two degrees. Due to the high humidity (over 80 per cent) the weather remains oppressive. Except for three dry months (December–February) sky remains overcast with clouds. Thunderstorms occur most frequently in the hot season. During the south-west monsoon season the winds are moderate, but with its retreat, typhoons affect the area. Some of these develop into full-fledged cyclonic storms lashing the coasts, accompanied by heavy rain and strong gusty winds endangering the lives of the seafarer

## FLORISTIC

Andaman and Nicobar Islands come under the zone of tropical rain forests of the world. The tropical hot and humid climate with abundant rains has resulted in a very luxuriant and rich vegetation in these islands. According to Champion and Seth (A revised survey of the forest types of India, 1968) the forests of these islands can be classified under the following main types

- 1 Giant evergreen forests
2. Andaman tropical evergreen forests
3. Southern hill top tropical evergreen forests
4. Andaman semi-evergreen forests
5. Andaman moist deciduous forests
6. Littoral forests
- 7 Mangrove forests

In addition to these 7 main types, there are also a few more types, *viz*, cane brakes, bamboo brakes, etc., which are not very important from the point of view of the area covered. Except mangrove forests all other types cannot be distinctly demarcated, but imperceptibly merge into each other

The evergreen forests are the most luxuriant type of multitier forests on these islands and form the climatic climax vegetation. The top canopy is formed by the giant trees almost entirely evergreen. They occur near the banks of the larger streams where soils are deep and alluvial. The main species found in these types are *Dipterocarpus* spp. (Gurjan), *Calophyllum soulattri* (Poon), *Artocarpus chaplasha* (Taungpienne), *Sideroxylon longepetiolatum* (Lambapatti), *Amoora wallichii* (Lalchini), *Sterculia campanulata* (Papita), etc.

Though very similar in composition, Andaman tropical evergreen forests are not as luxuriant as the giant evergreen forests particularly in the size of the top storey, density and height. Moreover top storey is very irregular and deciduous species are more frequent in this type. This type of forests occurs throughout the islands as caps to the hills, with the slopes having moist deciduous forests. *Dipterocarpus* spp. (Gurjan), *Artocarpus chaplasha* (Taungpienne), *A. gomeziana* (Kala Lakuch), *Calophyllum soulattri* (Poon), *Planchonia andamanica* (Red Bombway), *Hopea odorata* (Thingam), *Endospermum chinense* (Bakota), *Sideroxylon longepetiolatum* (Lambapatti), *Xanthophyllum andamanica* (Letpyaw), *Myristica andamanica* (Jaiphal), *Baccaurea sapida* (Khataphal) etc., are the main species occurring in this type.



*Andaman tropical evergreen forests*

Southern hill top tropical evergreen forests occur on hill tops and sometimes on steep slopes lower down on poorer soils and usually exposed to high winds. The vegetation is comparatively stunted in growth. The important species occurring in this type are *Dipterocarpus costatus*, *Mesua ferrea*, *Canarium manii*, *Hopea helferi*, *Cratoxylon formosum*, *Euphorbia trigona*.

Andaman semi-evergreen forests are also luxuriant type of forests which include giant trees of both deciduous and evergreen species. Climbers are usually plenty. This type of forest is mainly confined to the main valleys on well drained immature alluvial soil, *Dipterocarpus* spp. (Gurjan), *Pterygota alata* (Letkok), *Terminalia bialata* (white chuglam), *T. procera* (white Bombway), *Albizia chinensis* (Bonmeza), *A. lebbek* (Koko), *Calophyllum soulattri* (Poon), *Salmalia insignis* (Didu), *Artocarpus lakoocha*, *A. chaplasha* (Taungpienne), *Pterocarpus dalbergioides* (Padauk) and *Lagerstroemia hypoleuca* (Pyinma) are the common species occurring in this type.

Andaman moist deciduous forests are multi-storied, the top canopy of which is formed by the giant trees of about 40 metres in height, 3 metres in girth and heavily buttressed. They are confined to hilly ground usually not extending



*Southern hilltop tropical evergreen forests*

beyond 100 metres. These forests are the most important source of a number of valuable commercial timbers like *Pterocarpus dalbergioides* (Padauk), *Diospyros marmorata* (marble wood), *Terminalia procera* (White Bombway), *Sageraea elliptica* (Chooi), *Albizzia lebbek* (Koko), *Canarium euphyllum* (white Dhup), etc.

Littoral forests are found on the alluvial high level soil along the sea-coast beyond the reach of the sea. The most common species found in this type are *Mimusops littoralis* (Bullet wood), *Tetrameles nudiflora* (Thitpok), *Terminalia catappa* (Badam), *Calophyllum inophyllum* (Poon), *Pongamia glabra* (Karanja), etc.

Mangrove forests of these islands occupy shores, mouths of creeks and inland channels of these islands covering an area of about 1150 km<sup>2</sup> (Blasco 1975). The species that occupy the most outer seaward fringe are *Rhizophora mucronata*, *R. apiculata* and *R. stylosa* forming thick clusters. In the brackish water swamps that sometimes extend for pretty good distance from sea mouth, connected by creeks penetrating deeply into the interior the prominent species are *Bruguiera parviflora* and *B. gymnorrhiza*. Other mangrove species, e.g., *Sonneratia* spp. extend some distance inland into the tidal forests, whereas *Avicennia officinalis*, *Heritiera littoralis* and *Scyphiphora hydrophyllacea* grow towards the land side of the mangrove swamps.



4 Andaman semi evergreen forests

## ZOOGEOGRAPHY OF ANDAMAN AND NICOBAR ISLANDS

The Andaman and Nicobar groups of islands are situated in the Bay of Bengal between  $6^{\circ}45' - 13^{\circ}30' \text{ NL}$  and  $92^{\circ}20' - 93^{\circ}56' \text{ EL}$ . These islands are the summits of a submarine mountain range having a continuation with the Arakan Yomas of Burma in the north and the island festoons of Sumatra in the south. They first arose from the ocean bed sometimes in the Upper Mesozoic about 100 million years ago at the expense of a narrow but deep oceanic furrow. Sediments of various types started accumulating in this furrow since Upper Cretaceous (about 80 million years ago) and continued to accumulate till the Middle Eocene (about 50 million years ago). These were followed by the deposition of the flysch, consisting of a monotonous and wide spread succession of sandstone, silt-stone and clay beds, that filled up the basin (Karunakaran, 1967). The end of this phase of deposition of the sediments was marked by a tremendous earth movement, which took place sometimes in the Upper Oligocene about 30 million years ago, resulting the formation of long mountain ridges, a few metres above the sea level but mostly submarine. In this way the embryo of the present-day archipelago of Andaman and Nicobar Islands came into existence.

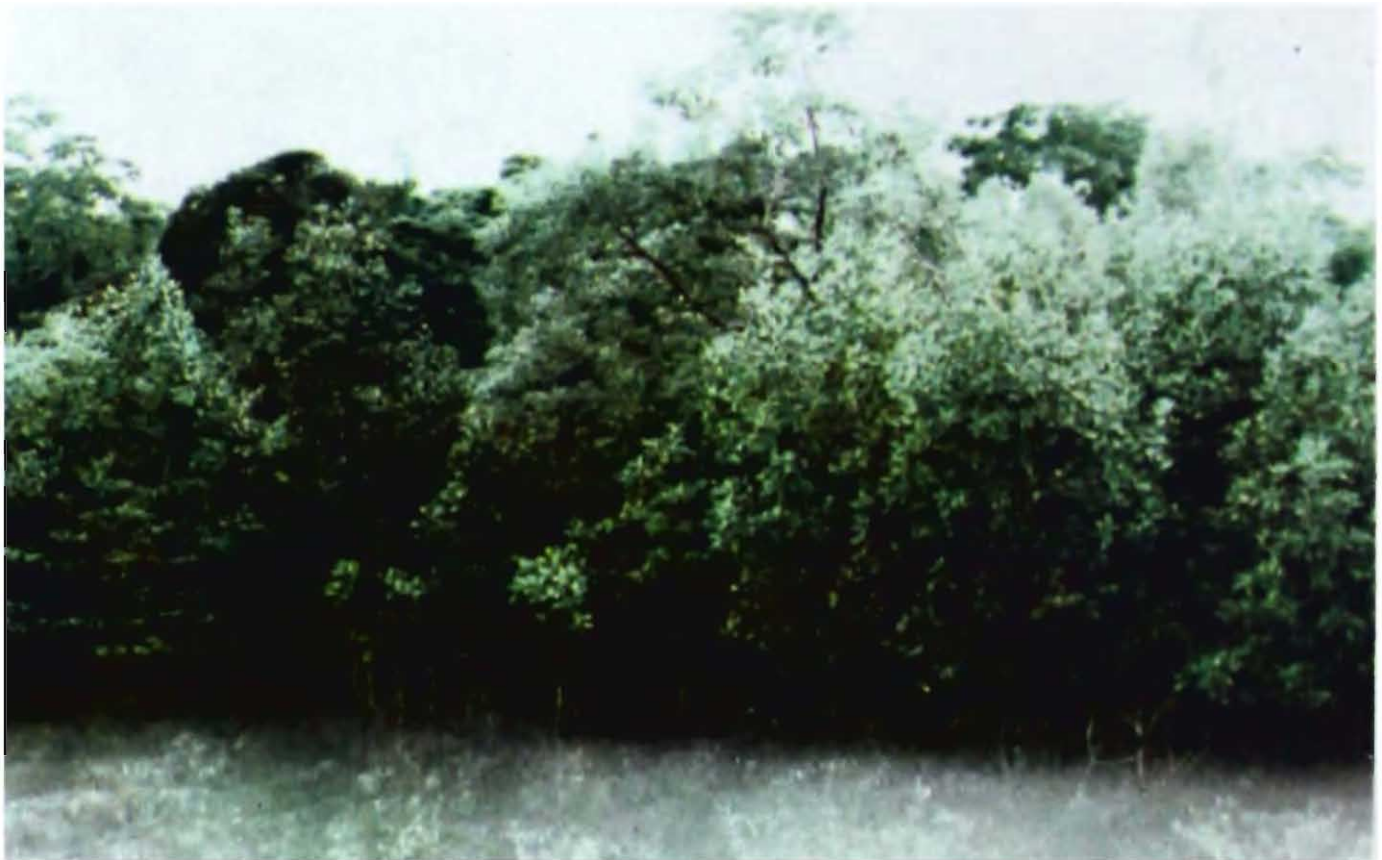
Another very important earth movement had overcome the deposition in this belt and the rocks were thrown into several folds and thrusts by the action of which the present-day configuration of these islands was more clearly



6 *Littoral forests*

established. Since then subsequent upheaval of this belt took place in several strides and these islands have undergone several periods of partial submergence and elevation. That this process of geological change still continues even in the recent years is indicated by the presence of many a loose marine shells and sand beach on the caps of certain hummocks from which the sea had receded in very recent years.

Due to geographical proximity and past geological connections of the Andaman Islands with Burma (Indo-Chinese subregion) and Nicobar Islands with Sumatra (Indo-Malayan subregion), it is expected that Indo-Chinese faunal elements should be prevalent in the Andamans, while Malayan elements in the Nicobars. This view is clearly expressed by Smith (1931) when he says, "Andaman contains an impoverished Burmese fauna, that of Nicobar approximates to the Sumatran type" But factual data which are presently available particularly on reptiles and mammals do not support this generalisation about the distribution of the islands fauna. Almost all the exotic species of lizards available in these islands are found in the Indo-Malayan subregion. Some of them occur in both Andaman and Nicobar Islands as well as Indo-China and Malaysia. That is why Stoliczka (1870) remarked "Several species of lizards and snakes are common to both, and the whole fauna generally resembles the Malayan, gradually passing into Burmese fauna" So far as the snakes are concerned excepting three species, namely *Ptyas mucosus*, *Naja naja kaouthia* and *Ophiophagus hannah* (which are found in the Indo-Chinese subregion) almost all the other exotic species of these islands belong both to Indo-Chinese and Indo-Malayan.



*Mangrove forests*

Among the exotic species of mammals of these islands the maximum faunal affinity is found with India (Chaturvedi, 1980). Again, some bats found to occur in the Andamans (but not in the Nicobars) are common to both the Indo-Chinese and Malayan Subregions. *Cynopterus sphinx* (Vahl), *Eonycteris spelaea* (Dobson), *Taphozous melanopogon* Temminck and *Megaderma spasma* (Linnaeus) are such examples. There are also bats, namely, *Taphozous saccolaimus crassus* Blyth, *Pipistrellus coromandra* (Gray) and *Hipposideros fulvus fulvus* Gray which are found in the Nicobar Islands and India (but not in the Andamans). Again, one species of bat, *Tylonycteris pachypus fulvida* (Blyth), is available in the Andamans, mainland India and Java but not in the Nicobars.

From the faunistic point of view, the most interesting fact is the absence of large mammals, and the presence of a considerable number of endemics among the inland vertebrates supports the general view that there is always a great tendency for speciation among the island animals.

Table 1 Number of species/subspecies of mammals, birds and reptiles of Andaman and Nicobar islands and of endemic species/subspecies there.

Name of the group	Total no. of species/ subspecies	No. of endemic species/ subspecies
<b>MAMMALS</b>		
Insectivores	4	4
Chiropterans	26	11
Primates	1	1
Carnivores	2	1
Artiodactyles	4	2
Rodents	14	11
<b>BIRDS</b>	<b>242</b>	<b>95</b>
<b>REPTILES</b>		
Snakes	40	13
Lizards	32	10

#### HISTORICAL REVIEW OF WORKS ON AVIFAUNA OF THE ANDAMAN AND NICOBAR ISLANDS

The Andaman and Nicobar group of islands has drawn the attention of many ornithologists since about the middle of the 19th century. The resident or visiting birds observed within or in the vicinity of these islands were reported in a series of publications by Blyth (1845, 1846, 1863, 1866). His main source of material was based on the collections made by Mr Barbe and Capt. Lewis. In a most interesting contribution of Mr F J Mouat entitled 'Adventures and

Researches among the Andaman Islands' a list of birds of the Andamans prepared by Blyth appeared as an Appendix in 1863. Within the following decade, several zealous naturalists notably Tytler (1865), Beavan (1867), Walden (1866, 1873), Ball (1870, 1872), etc., contributed much to the studies of birds of these islands. Pelzeln's treatise '*Reise der Novara Vögel*' is the first authentic report on the birds of the Nicobars, which appeared as early as 1865. Avifaunal reports, together with novelties, were brought out by Hume in a series of articles published in 1874, 1875, 1876 in "Stray Feathers" of which he was the editor. The large collection which he worked out (1874) was mainly made by W. R. Davison in 1872 and himself during an excursion by boat along with Stoliczka and many others. Important contributions to the avifauna of the islands, based on the collections made by Captains Ramsay, Wardlaw and Wimberley were made by Walden (1866, 1873, 1874). Butler (1899, 1900) also brought out interesting reports on the birds of these islands. An important collection made by W. L. Abott and C. Boden Kloss was later reported on by Richmond (1903). Kloss also gave a detailed description of various islands, their topography, physiography, and anthropology together with a list of birds recorded from the Islands. Some remote islands like Narcondam, Barren and Sentinel remained practically unexplored avifaunistically, till the end of the 19th century, until Osmaston in the early part of the present century made several trips to such islands and published interesting accounts (Osmaston 1905, 1906, 1908, 1933), not only on bird collections made but also on the nidification of several species. Migratory birds that are seasonal visitors to the islands were studied and reported by Whitehead (1912), Ferrar (1932), Bayley-De-Castro (1933) and Stapylton (1933). Mention may also be made of some bird observers like Walden (1874), St. John (1898), Cory (1902), Wickham (1910), and Kloss (1927) who contributed to the bio-ecological studies of some endemic species. There was a lull for nearly a decade when bird studies in the Andaman and Nicobar Islands were set aside. This was due partly to the Second World War which caused unsettled conditions in these islands and partly to the postwar settlement coupled with the programme of rehabilitation of the uprooted people as a result of partition of India in 1947. The administration of the Andamans and Nicobars was naturally heavily preoccupied with such programmes and faunistic surveys could only be resumed when transport and communication facilities became freely available in the year 1952. Since then the Zoological Survey of India has conducted several survey trips and quite a representative collection has been made. The Bombay Natural History Society also conducted several avifaunastic surveys during the last two decades under the able stewardship of Mr. Humayun Abdulali, who published detailed reports on the birds collected (Abdulali 1964, 1965, 1967-1981) not only by the Society but also by the Zoological Survey of India. A few notes on the taxonomy, status of species, etc. have also been contributed by Das (1971), Mukherjee and Dasgupta (1975), Dasgupta (1976), Saha and Dasgupta (1980) and Mukherjee (1981). Dr. Salim Ali, the celebrated ornithologist also made exploration of birds in the Andaman Islands in 1981.

Order I Pelecaniformes  
Family 1 Phaethontidae  
LONGTAILED TROPIC-BIRD  
1 *Phaethon lepturus* Daudin

About the same size as the Brownwinged Tern (No.84)(38 cm in length), except the tail with streamers that measures 45 cm.

A graceful satin-white bird with long, narrow wings pointed at tips; a discontinuous black band across the upper wings; head white with a striking black band running before and over the eye; tail-streamers ribbon-like broad and white like that of the male Paradise Flycatcher; iris dark brown, bill yellow; legs greyish white, webs of feet black, sexes alike.

A widely distributed species, ranging in the tropical and sub-tropical zones of the Atlantic, Indian and Pacific Oceans. The nominate subspecies *P. l. lepturus* Daudin has been recorded as a straggler from the Andaman Islands.

Met with singly offshores; often diving headlong to fish from quite a height; food comprises fishes, squids and other marine organisms; voice and calls — a harsh *kra*.

Order II Ciconiiformes  
Family 2. Ardeidae  
LARGE EGRET  
2. *Ardea alba* Linnaeus

About the same as, or slightly smaller than, the Grey Heron (91 cm in length).

A large, spotless snow-white, heron-like marsh bird with a long slender neck and head, yellow massive bill; long, bare, black legs and feet; during breeding period bears long filamentous plumes on back, and bill turns black; iris bright lemon-yellow; sexes alike.

An extensively distributed species in the tropics and subtropics of the World, absent from most parts of Europe, except the Southeast; represented by two subspecies within the Indian limits, of which *A. a. modesta* J. E. Gray, occurs in the Andaman Islands in winter

Rarely seen along shores, solitary, standing motionless in shallow water preying on marine animals within its reach, voice and calls — generally silent.

## GREY HERON

### 3. *Ardea cinerea* Linnaeus

About the same size as the Purple Heron but more stoutly built (98 cm in length, 75 cm in height).

A tall, slender long-legged, slaty grey marsh bird with the crown and neck white, the latter with black stripes; a drooping black occipital crest; breast bears elongated white feathers with black streaks; iris golden yellow; large pointed bill, and long bare legs attain bright orange-yellow during breeding and brown during non-breeding periods; female slightly smaller and with less elongated crest and breast plumes than male, otherwise sexes alike.

A widely distributed species of the temperate and tropical areas of the Old World, represented by two subspecies, of which *A. c. rectirostris* Gould occurs within the Indian limits including the Bay Islands as a resident.

Frequently met with singly in tidal creeks, estuaries and brackish water swamps; haunting activities restricted to dawn and dusk; food comprises fishes, frogs, reptiles, small mammals and arthropods; breeds in colonies on trees in rainy season, lays three or four eggs in a centrally depressed nest made of twigs; voice and calls — a deep harsh *croak* when taking off

## PURPLE HERON

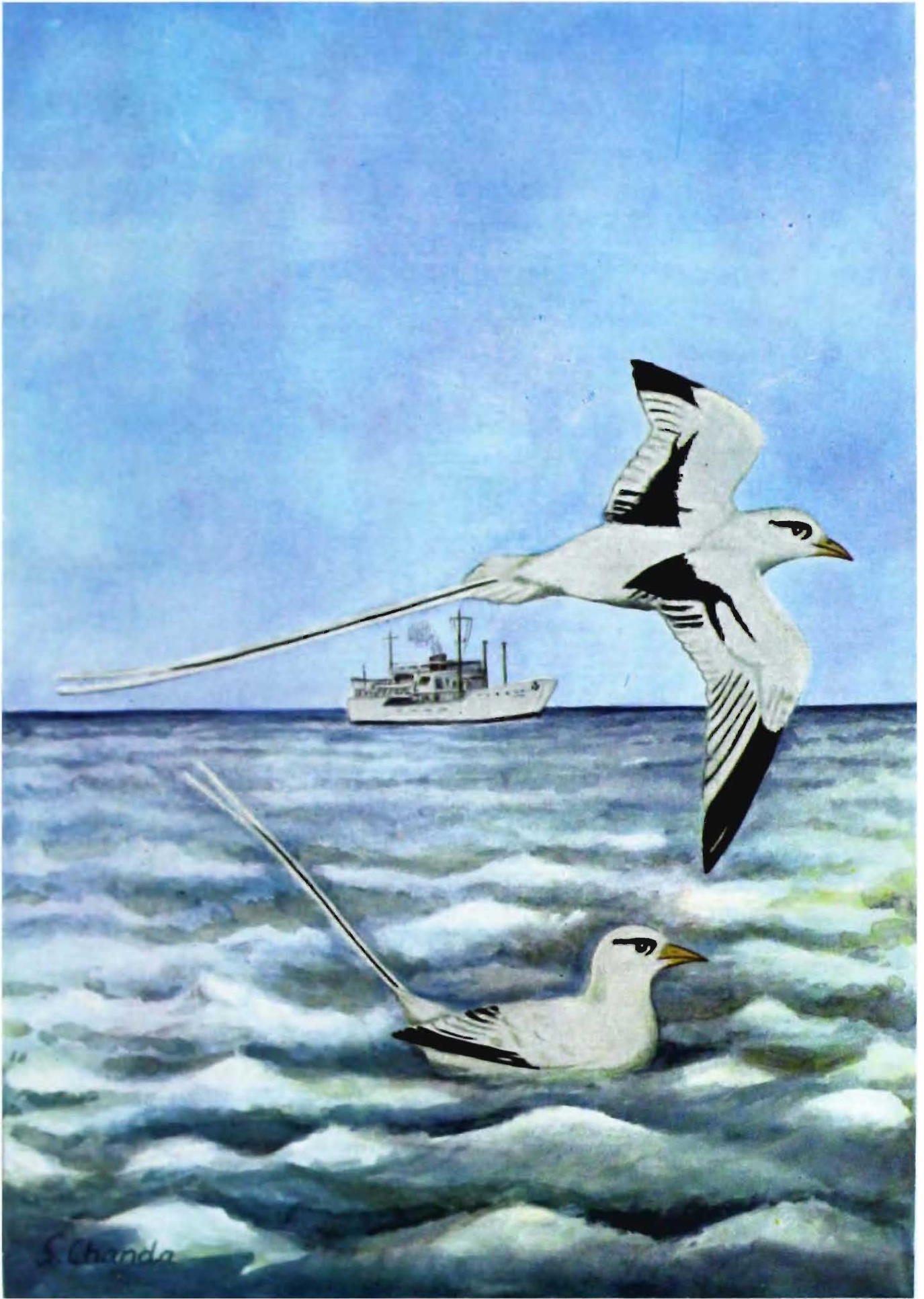
### 4. *Ardea purpurea* Linnaeus

About the size of the Grey Heron but more slenderly built (97 cm in length, 70 cm in height).

A slender marsh bird, purplish slaty blue above; crown bearing a black crest; neck long snake-like, ferruginous, striped with black and buff; upper breast bears drooping buffy white plumes; abdomen black and chestnut; iris yellow; bill long, pointed and yellow, culmen and tip horny brown, legs long, slender reddish brown, the female bears less developed crest and pectoral plumes.

A widely distributed species, ranging from southern Europe across Asia to China, Philippines, and Sulawesi. The species is represented by two subspecies within the Indian limits, of which *A. p. manilensis* Meyer, occurs in the Bay Islands as a common resident.

Frequently met with in reed beds; swamps, jheels and along drainage; crepuscular activities restricted to dawn and dusk, food comprises aquatic and terrestrial arthropods, fishes, frogs and reptiles; breeds in colonies in the rainy season on trees; lays three to five eggs in a centrally depressed nest made of twigs; voice and calls — a loud harsh *croak* when startled.



*Phaethon lepturus lepturus*. Daudin. Male and female.

## CHINESE POND HERON

### 5. *Ardeola bacchus* (Bonaparte)

A little larger than the Pond Heron (52 cm in length).

Plumage very similar to *Ardeola grayii* (Sykes) (No. 6) except the deeper brown back (non-breeding); head and neck chestnut; back blue-black; breast plumes elongated, maroon-chestnut, blackish towards the end, remainder of plumage white; iris deep golden yellow; bill yellow, blackish on terminal quarter bluish at base; legs and feet yellowish green, sexes alike.

The resident species ranges from eastern India to China and south to Malay Peninsula, Kalimantan and the Bay Islands.

Frequently met with singly in tidal creeks and inland marshes; food comprises small fishes, aquatic arthropods and grass insects; colonial breeding in mixed heronry on foliated trees during the rains; the clutch in the islands normally three to five eggs.

## POND HERON

### 6. *Ardeola grayii* (Sykes)

About the size of the Whitebreasted Waterhen but with a longer neck (46 cm in length).

A small squat dingy coloured marsh bird, heavily streaked with pale yellowish buff on head and neck; back ashy brown, chin, throat and breast white, the latter streaked with brown, rest of underparts including tail white (non-breeding); head and neck light yellowish brown, rusty brown hair like plumes on back and long lanceolate plumes on crest; breast ashy brown, the feathers long and decomposed, chin, throat and underparts including tail remain white (breeding); iris bright yellow; bill bluish at the base, yellowish about the middle and black at the tip; legs and feet dull green, sexes alike in non-breeding and breeding plumage.

Extensively distributed species in the Oriental region from Persian Gulf across India to Malaysia and several islands of the tropical Indian Ocean. The nominate subspecies *A. g. grayii* (Sykes) occurs in the Andaman and Nicobar Islands as a resident.

Frequently met with singly, occasionally in twos or loose parties, in creeks, ponds, pools, puddles, marshes and swamps, wading in shallow waters or standing motionless at water margins, patiently waiting for the quarry to dart at; food comprises aquatic as well as terrestrial organisms such as fishes, frogs, crustaceans, annelids, molluscs and insects; colonial breeding in mixed heronry on foliated trees during the rains; the eggs four to six in number; voice and calls — a harsh croak.



*Ardeola striatus spodiogaster* (Sharpe) Male.

## LITTLE GREEN HERON

### 7 *Ardeola striatus* (Linnaeus)

About the same size as the Pond Heron (46 cm in length).

A small grey bird with the upperparts glossy greenish black; feathers of scapulars and interscapulars long and lanceolated, occipital crest black, glossed with green, chin and throat white; underparts dark slaty grey; iris bright lemon-yellow; bill dark horny brown with greenish tinge below; legs and feet yellowish leaf-green, sexes alike.

Widely distributed throughout tropical parts of the World, north to Japan and Amurland, represented by four subspecies within the Indian limits, of which *A. s. spodiogaster* (Sharpe) is endemic in the Andaman and Nicobar Islands.

Frequently met with singly in mangrove and tidal creeks along shores; skulks by day but becomes active from dusk to dawn, foraging among reedy thickets and underneath canopied mangrove trees; food comprises fishes, frogs, arthropods and worms; non-colonial nesting on mangrove trees, and lays three to five eggs in stick nest; voice — repeated alarm shrill notes.

## CATTLE EGRET

### 8. *Bubulcus ibis* (Linnaeus)

About the same size as the Chinese Pond Heron (51 cm in length).

Entire plumage milk-white; bill yellow; legs and feet black (non-breeding); orange-buff hair-like plumes on head, neck and back (breeding); iris pale golden yellow; sexes alike.

Widely distributed species in the temperate and tropical belts in southern Palaeartic, Ethiopian, Oriental, Australian, southern Neotropical and Nearctic regions. The subspecies *B. i. coromandus* (Boddaert) occurs within the Indian limits including the Bay Islands as a resident.

Common in marshy and wet meadows, but also found in grassland and cultivations, mostly seen following grazing animals to stalk insects and aquatic and terrestrial small vertebrates; colonial nesting in tall trees; breeding season is dependent on the monsoon, the clutch consists of three to five eggs; voice and calls — a low croak, when at nest.

## LITTLE EGRET

### 9. *Egretta garzetta* (Linnaeus)

About the size of the Pond Heron, but with a longer neck (63 cm in length).

Entire plumage snowy white; neck slender and long; bill black; legs lanky black, feet greenish yellow; during breeding period bears two long white drooping crests, and also filamentous plumes on back and breast; iris yellow; face skin greenish yellow; sexes alike.

An extensively distributed species in temperate and tropical parts of the Old World, extending from southern Europe to Africa, and through East and South Asia to Australia. The nominate subspecies *E. g. garzetta* (Linnaeus) occurs within the Indian limits including the Andamans and Nicobars as a resident.

Gregarious; seen on mud-flats of creeks, rivers, sea-shores and inland marshes, wades in shallow water to hunt fishes, frogs, aquatic arthropods etc.; colonial nesting in mixed heronries on trees in the month of monsoon, the clutch consists of four or five eggs.

## SMALLER EGRET

### 10. *Egretta intermedia* (Wagler)

Slightly larger than the Little Egret (65 cm in length).

Entire plumage snowy white. Differs from *Ardea alba* Linnaeus (No. 2) by being smaller in size (non-breeding) and in having a cluster of long plumes on breast as well as back (breeding); crest absent; iris lemon-yellow; bill yellow in non-breeding, turns black in breeding dress; legs and feet dusky black, greenish on the joints and tibia, sexes alike.

An extensively distributed species, occurring throughout the Oriental, Palaearctic, and Australian regions. The nominate subspecies *E. i. intermedia* (Wagler) occurs within the Indian limits including the Andaman and Nicobar Islands as a resident.

Common; gregarious; affects jheels, marshes, coastal backwaters, tidal estuaries and mangrove swamps; wades in shallow water to hunt fishes, frogs and aquatic arthropods; colonial nesting in mixed heronries on mangrove forests in rainy season; lays four eggs in stick nest.

## REEF HERON

### 11 *Egretta sacra* (Gmelin)

About the size of the Little Egret, but with stouter bill and legs (58 cm in length).

More or less like *Egretta garzetta* (Linnaeus) (No. 9) in general effect but occurs in two coloured phases (i) dark slaty grey and black (ii) snow-white. During breeding season develops nuchal crest of thick hairy feathers and long lanceolate slaty grey ornamental plumes on back and lower foreneck; iris yellow; bill brown above and yellow underneath, often yellow all over in white birds; legs vary from yellowish green (in white birds) to deep dull greenish (in dark individuals); sexes alike.

An extensively distributed resident species in the Indian and Pacific islands and continental shores extending from East and Southeast Asia through Indonesia to Australia and New Zealand. It occurs in the Bay Islands.

Not uncommon in both the group of the Bay islands, affecting rocky and coral beds and sandy shores; met with singly, wades in shallow waters and remains poised, suddenly darting at the quarry entering within the ranges; food comprises fishes, molluscs and crustaceans; colonial nesting in mangrove trees, sometimes on rocks and hollows; the breeding season is dependent on monsoon, the clutch consists of three or four eggs; voice — grunted croak.

## NIGHT HERON

### 12. *Nycticorax nycticorax* (Linnaeus)

About the same size as the Reef Heron (58 cm in length).

A stocky looking heron, ashy grey with glossy greenish black extending to back and white below; forehead white, and wings and tail ashy; a thin drooping crest of a few white feathers; iris deep red, bill very stout, black, greenish yellow at base and on most of lower mandible; legs and feet lemon-yellow and turns pinkish in breeding dress; sexes alike.

A widely distributed species, more or less cosmopolitan, ranging from Europe to Asia, Africa, and both the Americas. The nominate subspecies *N. n. nycticorax* (Linnaeus) occurs within the Indian limits including the Bay Islands as a resident.

Common, met with in marshes, mangrove forested areas along tidal creeks and backwaters; gregarious roosting; flies at dusk for foraging in wetland areas, skulks by day roosting on trees near water; food comprises aquatic organisms such as fishes, frogs, crustaceans, insects etc., communal nesting in mixed heronry in fixed areas; breeds during the monsoon, the clutch consists of three or four eggs; voice and calls — a deep *wark* in flight at dusk or at night.



*Egretta sacra* (Gmelin) Males . White phase above. dark phase below.

## TIGER BITTERN

### 13. *Gorsachius melanolophus* (Raffles)

Smaller than the Night Heron (51 cm in length).

Entire plumage chestnut-brown above, finely vermiculated with black; head black, bears a crest of ashy black feathers; chin and throat white; upper breast sandy rufous, streaked with black, and rest of underparts white, streaked and spotted with black and rufous; iris golden yellow; bill fleshy yellow, the culmen and tip horny brown, legs and feet green, brownish in front; sexes alike.

A discontinuously distributed species, found in the Indian subcontinent, east to Indonesia. It is represented by two subspecies within the Indian limits, of which *G. m. minor* Hachisuka, is endemic in the Nicobar group of islands. It differs from the nominate subspecies *G. m. melanolophus* (Raffles) in being smaller in size.

Rarely seen, inhabits swamps and marshes of thick forests; food consists of frogs, molluscs, insects etc., voice and calls — normally silent.

## CHESTNUT BITTERN

### 14. *Ixobrychus cinnamomeus* (Gmelin)

Smaller and slender than the Pond Heron (38 cm in length).

A cinnamon-brown coloured heron-like bird, with the lower parts pale chestnut; chin and throat whitish with a median streak of blackish on throat and breast; female duller; foreneck and breast heavily streaked with brown; underparts streaked yellowish buff; orbital skin rosy red in male and yellow in female; iris yellow to pale red, bill greenish yellow, the culmen blackish and base of the mandible rosy red, legs and feet yellowish green.

Widely distributed resident species in the Oriental region and also China. It is found in the Bay Islands.

Not uncommon, met with singly in fresh and brackish water swamps in the inner recesses of dense marshes, skulking by day but active during dusk and dawn or during the day when sky is overcast with clouds. Forages under the cover of darkness on mudflats; food comprises fishes, frogs, crustaceans, insects, etc., nests among reedy platform or in cane-brakes in swamps, quite low but safe above the water-level, breeds during the rains from June to August; the clutch consists of four or five eggs; voice and calls — a loud *kook*, *kook kook*, during breeding period, otherwise normally silent

## YELLOW BITTERN

### 15. *Ixobrychus sinensis* (Gmelin)

About the same size as the Chestnut Bittern (38 cm in length).

A small, yellowish brown bittern with the head, crest, primary wing feathers and tail black, upper breast blackish with dark lanceolate feathers across; rest of underparts pale buff; female duller buff streaks on upper breast obscure; iris orange-yellow; legs and feet yellow.

Widely distributed resident species in southeastern and eastern Asia as far east as China and Japan, and in the southeast from India including the Bay Islands to Indonesia, extending further to New Guinea and Caroline Islands.

Not uncommon, affects fresh and brackish water swamps; met with singly among reedy and grassy beds, actively foraging in oozy bog wallowing in mud and water during dusk and dawn; on least alarm stands stiff and still among reeds to provide protective mimicry; food comprises fishes, frogs, crustaceans, molluscs, insects etc., nests among thick reeds growing in water above the water-level; the breeding season follows immediately the monsoon, the usual clutch consists of four to six eggs; voice and calls — silent.

## Order III Anseriformes

### Family 3. Anatidae

## LESSER WHISTLING TEAL

### 16. *Dendrocygna javanica* (Horsfield)

Smaller than the Domestic duck (42 cm in length).

A small pale brown duck with dark maroon-chestnut on wings; upper tail-coverts uniform chestnut; tail dark brown; legs plumbeous-grey, long and stout, lower portion reticulated, feet large; iris dark brown; bill slaty grey to almost black; sexes alike.

Widely distributed resident species, spread over the Indian subcontinent including the Andamans, east to South China, Taiwan, Riukiu islands, south to Malaysia and Indonesia.

It congregates in large and small parties in creeks, lagoons, freshwater inland waters and swamps; forages in cultivation at night spending the day in or near about water often gets mixed up with the Grey Teal and domestic ducks; food comprises wild grass seeds, paddy, aquatic weeds, also fishes, worms etc; perches on trees and nests in tree-hollows or forked branches, often utilizing old nests of other birds; sometimes nests on ground in bushy grass; breeds in the rains from June to September and usually lays eight to ten eggs; voice and calls — a continuous shrill whistle *seasick, seasick*.

## COMMON TEAL

### 17 *Anas crecca* Linnaeus

About the size of a half-grown domestic duck, considerably larger than the Cotton Teal (38 cm in length).

A small duck with a chestnut head and back pencilled with black and grey; patch round and behind eye metallic green, speculum green and black in both sexes; tail brown, breast dull white, spotted with black; rest of underparts whitish, under tail-coverts black; female mottled brown and buff; iris brown; bill black, legs and feet light bluish.

Widely distributed species of the temperate Holarctic, wintering in southern North America, Africa and southern Asia. The nominate subspecies *A. c. crecca* Linnaeus occurs within the Indian limits including the Bay Islands during winter

Infrequently met with in freshwater as well as coastal areas; food consists of shoots, tubers and seeds of aquatic plants and also grains; voice and calls — a double noted *krit-krit* by the drake and quack by the duck.

## GREY TEAL

### 18. *Anas gibberifrons* (Müller)

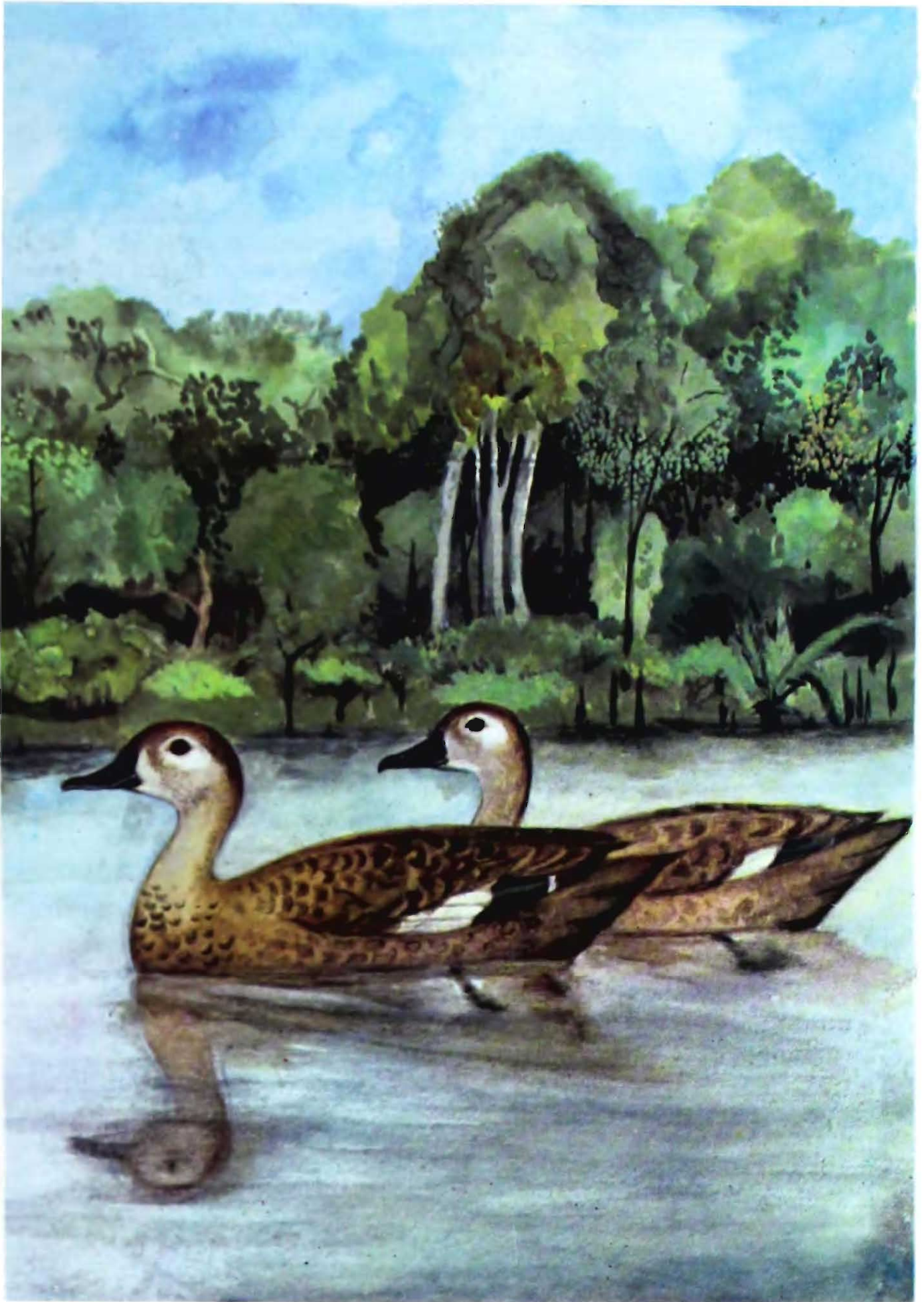
Larger than the Common Teal (43 cm in length).

Plumage dark brown above, feathers of the back edged greyish, wings brown with a green and black speculum, bordered with white bars in front and behind, the latter becomes conspicuous in flight; a variable amount of white on the face and a conspicuous white ring round the eye; underparts buff, spotted with dark brown; female comparatively dull; iris red, bill greenish blue; legs and feet dark greenish.

The species is confined to the oceanic islands of Australia and the Andamans. The subspecies *A. g. albogularis* (Hume), is endemic in the Andaman group of islands.

Affects freshwater ponds, also tidal creeks, swampy grassland and cultivation, food comprises wild grass, grains, tender shoots, also arthropods and worms; nests in natural hollows in tree trunks, alternatively on ground in grass tufts; the clutch consists of ten eggs; voice — a soft whistle.

*Note* Once common but in recent years population has appreciably depleted.



*Anas gibberifrons albogularis* (Hume). Male and female.

## COTTON TEAL

### 19. *Nettapus coromandelianus* (Gmelin)

Smaller than the Common Teal, more or less of the size of a rock pigeon (33 cm in length).

A small wild duck, with predominatingly white plumage; glossy green above with a blackish brown crown and a broad black collar on lower neck; a white wing bar prominent in flight, in male; female duller and lacks the collar and wing bar and with dark line through the eyes; iris red-brown in male, brown in female; bill black in male, brown in female; legs and feet blackish brown.

An extensively distributed species throughout the southern Asia, Malaysia, Philippines and eastern Australia. The nominate subspecies *N. c. coromandelianus* (Gmelin) occurs throughout the Indian limits, and straggler to the Andamans.

Found in small numbers in inland freshwater pools, ponds, inundated grasslands or cultivated tracts; food comprises seeds of aquatic grass, cultivated grains, arthropods and worms; voice and calls — a peculiar clucking on flight.

## Order IV Falconiformes

### Family 4. Accipitridae

#### BLACKCRESTED BAZA

### 20. *Aviceda leuphotes* (Dumont)

About the size of the Kestrel (33 cm in length).

A handsome little hawk with a prominent black vertical crest; upperparts glossy black; scapulars and flight feathers with bold white and chestnut blotches; breast white, succeeded by a blackish-rufous band, lower breast to upper abdomen rufous; rest black; female larger; iris dark brown; bill pale slate, darker on the edges and culmen, legs and feet dull plumbeous.

A discontinuously distributed species in greater part of the Oriental region, represented by three subspecies of which *A. l. andamanica* Abdulali & Grubh, is endemic in the Andamans. It differs from the nominate subspecies *A. l. leuphotes* (Dumont) in having thinner band across the breast and underparts unbarred.

Infrequently met with singly in well-forested areas, wheeling over tree-tops, sallying after insects; food comprises large insects, small birds, etc.



*Aviceda leuphotes andamanica* Abdulali and Grubh. Male.

## PARIAH KITE

### 21 *Milvus migrans* (Boddaert)

Larger than the Brahminy Kite (61 cm in length).

A large fulvous to chocolate-brown bird, streaked with black on head and underparts, tail long and deeply forked, barred with black; legs yellow, short and partly feathered, claws black; iris brown; bill black; sexes alike.

A widely distributed species in temperate and tropical parts of Europe, Africa, South Asia to southern China, New Guinea and Australia. The subspecies *Milvus migrans govinda* Sykes, occurs within the Indian region. It is, however a rare straggler to the Bay Islands, those recorded are presumably ship-borne from the mainland.

## BRAHMINY KITE

### 22. *Haliastur indus* (Boddaert)

Smaller than the Pariah Kite (48 cm in length).

A familiar handsome chestnut bird of prey; head, neck and breast white, with narrow black streaks, and black tipped primaries; sexes alike, except that the female is larger; iris brown; bill bluish horn, culmen and tip paler; legs and feet greenish yellow.

A widely distributed species, extending from the Indian subcontinent to southern China, Australia and Solomon Islands. The nominate subspecies *H. i. indus* (Boddaert) occurs within the Indian limits including the Andamans as a resident.

Affects sea coast and inland waters; flies round, floating lazily and swooping suddenly over water surface for the quarry; food comprises largely fishes, sometimes small mammals, birds, lizards, etc., and also serves as a scavenger. Voice and calls — a long shrill, mewing squeal *chee-e-e* like that of a Pariah Kite.

## SHIKRA

### 23. *Accipiter badius* (Gmelin)

About the size of the Pigeon, but more slender and with a longer tail (31 cm in length).

A small hawk, bright grey above, whitish barred with rufous below; supercilium white and distinct; chin and throat buffy; flight feathers blackish at

the tips, tail long, with a single subterminal black band, female larger and rufous-chestnut, tail with broad black bands; legs unfeathered, feet yellow; claws black and powerful.

A widely distributed species throughout South and Southeast Asia extending as far north as southern China and west to Africa, south of Sahara, represented by six subspecies within the Indian subcontinent, of which *A. b. butleri* (Gurney) in Car Nicobar and *A. b. obsoletus* (Richmond) in Katchal Island are endemic. The subspecies *obsoletus* differs from *butleri* in being larger in wing; also the white superciliary line indistinct; throat white; breast pale grey as against rufous; iris crimson instead of yellow.

Not uncommon; affects open wooded forest and the environs of villages and cultivation, perches on top of branches, waiting for the moment for a surprise dash on quarry, dodging between trees and shrubs overtaking it with rapid flight; food comprises lizards, small birds, rodents and large insects.

#### SPARROW-HAWK

#### 24. *Accipiter nisus* (Linnaeus)

About the size of the Shikra (31-36 cm in length).

Very similar to *Accipiter badius* (Gmelin) (No. 23); darker slaty grey above with longer and more slender legs; head almost black; supercilium whitish, tail feathers conspicuously banded (4-5); female considerably larger than male, more brown, paler below; iris golden yellow; bill slaty blue with black tip; cere yellow; legs and feet yellow.

A Palaearctic breeding species in Europe, south to the Canary Islands, wintering in India, Burma and southern China. It is represented by two subspecies within the Indian limits, of which the paler form *A. n. nisosimilis* (Tickell) occurs in the Andaman Islands as a winter visitor

Met with singly infrequently in well-wooded country; hunts in the manner of a Shikra, food comprises smaller birds, rodents, reptiles, etc., voice and calls — silent in wintering areas.

#### HORSFIELD'S GOSHAWK

#### 25. *Accipiter soloensis* (Horsfield)

About the same size as a domestic pigeon (30 cm in length).

Upper plumage dark slaty grey, the feathers edged with black and scapulars with white central spots; underparts white with a rufous-grey wash on breast

and flanks; throat white, narrowly streaked with dark grey; tail long, faintly barred with blackish and tipped white; iris dark brown to pale yellow; bill horny plumbeous, black at tip, yellowish at gape; cere orange; legs and feet orange-yellow; sexes alike.

An extensively distributed species of the northeastern and eastern Asia, breeding in Korea, China and Taiwan, wintering in southeastern Asia in Burma, Malaysia, Indonesia and the Bay Islands.

An infrequent visitor to the forested areas; feeds on frogs and lizards.

### BESRA SPARROW-HAWK

#### 26. *Accipiter virgatus* (Temminck)

About the size of the female Shikra (31-36 cm in length).

A medium-sized hawk, slaty grey above, underparts rufous, sometimes barred, nape-feathers grey; chin and throat white with a black line down the centre of throat; tail grey with a few blackish crossbands; female dark brown above; head almost black; throat white with a dark median line; lower parts barred with brown or rufous; iris crimson in male, straw-yellow in female; bill slaty blue, tipped black; cere yellow; legs and feet yellow.

An extensively distributed species, ranging from the Indian subcontinent to southern China, Philippines and Indonesia, represented by four subspecies within the Indian limits, of which *A. v. gularis* (Temminck & Schlegel) occurs in the Bay Islands as a resident.

Not uncommon in forested tracts, often seen perched on tall dead trees; hunting in the manner of the Shikra, food comprises small birds and mammals; in the Nicobars, nesting and breeding unconfirmed but in the Andamans during March-April; clutch consists of three eggs.

### CRESTED HAWK-EAGLE

#### 27. *Spizaetus cirrhatus* (Gmelin)

About the size of the Crested Serpent Eagle (72 cm in length).

A slender eagle, brown above; underparts white with black longitudinal streaks on throat and dark-brown-streaks on breast; head rufous with dark shafts; crest black on hind crown, wings rounded near the tip; tail longer than that of true eagles; female larger than the male, otherwise sexes alike; iris pale khaki to bright orange-yellow; bill horny black, feet lemon-yellow, legs long, slender and fully feathered.



*Spizaetus cirrhatus andamanensis* Tytler. Male.

An extensively distributed species of the Indian subcontinent, extending east through Indonesia to Philippines. It is represented by three subspecies within the Indian limits, of which *S. c. andamanensis* Tytler is endemic in the Andaman group of islands. It differs from the nominate subspecies *S. c. cirrhatus* (Gmelin) in being smaller and with a markedly shorter crest.

Common in mangrove areas as well as in upland forests, encircling over forest trees for hunting, food comprises lizards, birds, mammals, crabs, etc; breeds during winter: the clutch consists of a single egg.

## WHITEBELLIED SEA EAGLE

### 28. *Haliaeetus leucogaster* (Gmelin)

A heavy built large eagle, larger than the Pariah Kite (66-71 cm in length).

A handsome eagle, above ashy brown, with head, neck and underparts pure white; tips of primary feathers blackish; tail wedge-shaped, blackish with broad white tips; neck feathers long and pointed; iris hazel-brown; bill dark laden; legs and feet pale yellowish white to greyish white; claws grooved underneath; female larger than the male, otherwise the sexes alike.

A widely distributed species, extending from coasts of India including the Bay Islands to southern China, Australasia and the Bismarck Archipelago.

Common, met with singly or in pairs along the coasts, sometimes ventures up the tidal estuaries; food comprises fishes, snakes and other aquatic creatures which it hunts with great speed, nests from October to February, favours same nesting site year after year: the clutch consists of two eggs; voice and calls — a distinctive *kak-kak-kak*.

## MARSH HARRIER

### 29. *Circus aeruginosus* (Linnaeus)

About the size of the Brahminy Kite (54-59 cm in length).

A dark-brown harrier with pale rufous head, neck and breast; wings long, grey with black primaries; tail silvery grey, tipped white; female slimmer uniform dark brown with buff head and shoulders; iris hazel brown to golden yellow; bill horny black; cere yellow; legs and feet yellow to orange-yellow.

A widely distributed species of the Old World; represented by two subspecies within the Indian limits, of which the nominate subspecies *C. a. aeruginosus* (Linnaeus) occurs in the Bay Islands in winter



*Haliaeetus leucogaster* (Gmelin) Male

Frequents marshlands and jheels; met with singly or in pairs, sallying leisurely quite low, investigating the areas in search of prey; food comprises fishes, frogs, lizards, birds, rodents, larger insects etc; voice and calls — generally silent outside the breeding season.

### PALE HARRIER

#### 30. *Circus macrourus* (S. G. Gmelin)

Somewhat smaller and more slender built than the Brahminy Kite (46-51 cm in length).

A slender hawk, pale ashy grey above, pure white below; wings long and pointed with black tips; upper tail-coverts barred grey and white; tail feathers white, barred with grey; female dark brown, prominent rufous ruff; rump patch white, streaked with brown, central tail-feathers greyish-brown, outer tail-feathers buff, cross-banded with dark brown, lower plumage creamy white, streaked with dark brown, iris yellow in adult; bill horny black, plumbeous at base of lower mandible; legs and feet chrome yellow.

An extensively distributed species of eastern Europe, extending through the Black Sea, Tian Shan to southern Russia, wintering in Africa and the Indian subcontinent including the Andamans.

Uncommon, met with singly or in loose parties of three or four sallying over crop fields and fallow-land in search of quarry; food comprises insects, lizards, birds and small mammals, specially rodents; voice and calls — silent outside the breeding season.

### MONTAGU'S HARRIER

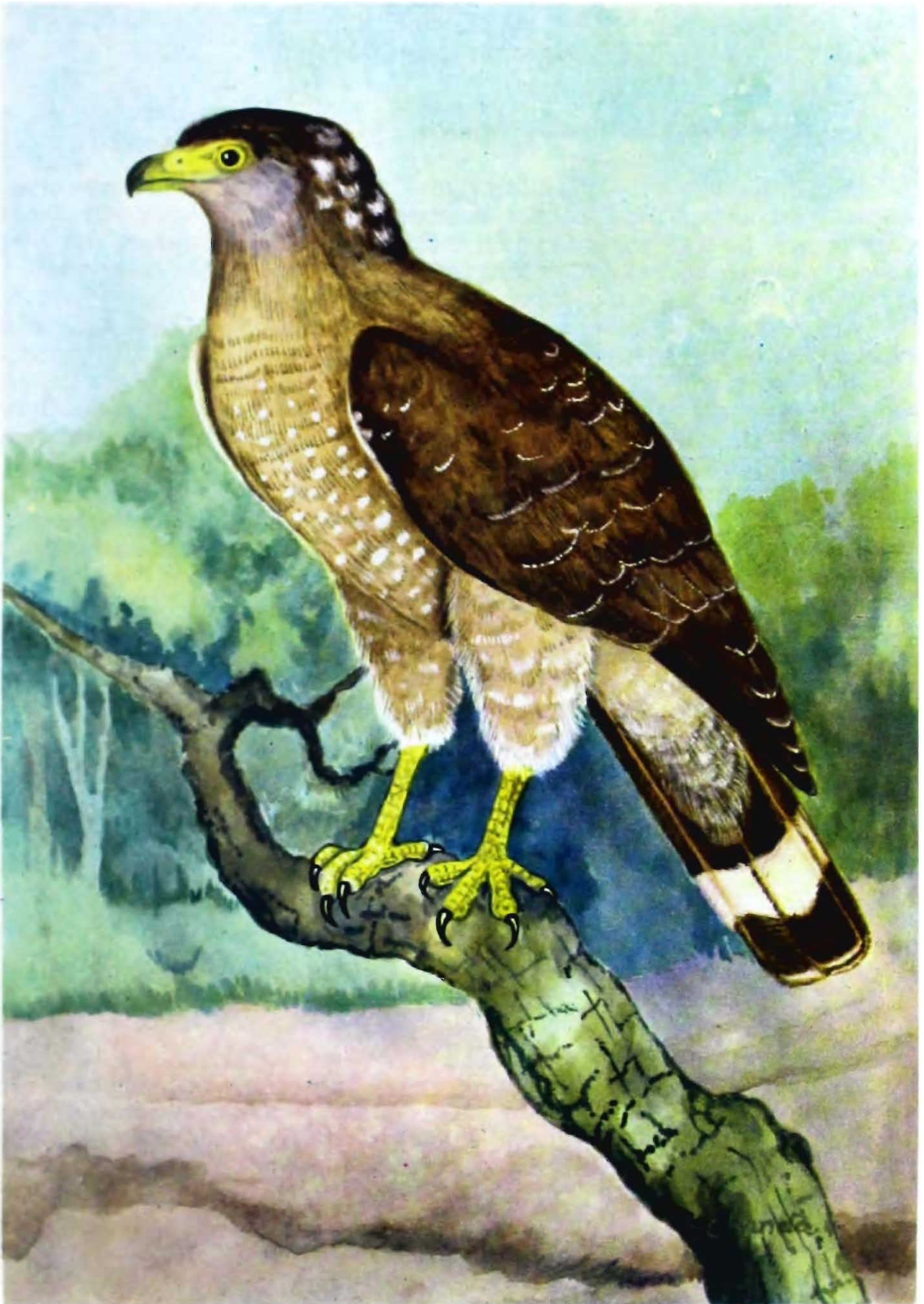
#### 31 *Circus pygargus* (Linnaeus)

Smaller than the Pariah Kite and much slimmer (46-49 cm in length).

A slim kite-like, ash-grey harrier with a long white tail, barred with grey; throat and breast grey; a dark band across wings and brown streaks on flanks, abdomen and vent; rump grey; female dark brown; rump white; underparts streaked buffish, iris yellow in adult; bill black, plumbeous at base of lower mandible; legs and feet short, chrome yellow.

A Palearctic breeding species; wintering in Africa and South Asia. It is a winter visitor in the Andaman Islands.

Uncommon, met with singly in the countryside, often sallying over ploughed fields or grassland in search of prey; food comprises insects, lizards, birds and small mammals, specially rodents; voice and calls — silent in winter



*Spilornis cheela davisoni* Hume Male.

## CRESTED SERPENT EAGLE

### 32. *Spilornis cheela* (Latham)

Larger and heavier than the Pariah Kite (74 cm in length).

A dark brown eagle with a black head, bearing a black and white broad nuchal crest; underside paler with numerous white spots and finely barred with dark brown; tail dark with a central broad white band; scapulars and wing coverts narrowly tipped with whitish; cere and bare legs yellow; sexes alike.

An extensively distributed species in South and Southeast Asia. It is represented by six subspecies within the Indian limits, of which *S. c. davisoni* Hume and *S. c. minimus* Hume occur in the Andamans and Nicobars (except Great Nicobar Island) respectively, and *S. c. malayensis* (Swann) in the Great Nicobar Island. The first one *davisoni* is larger and paler breast more finely barred than of *minimus*, which is smaller darker and with unbarred breast; *malayensis* is intermediate in size between the other two, from *davisoni* it differs in being much lighter wing quills and rectrices relatively dark and ear-coverts, chin and throat slate-brown, from *minimus* it can only be differentiated in being larger in size. *Spilornis c. davisoni* and *minimus* are endemic in the Andaman and Nicobar Islands.

Common, inhabits mangrove forests of estuaries and lagoons; soaring exercise includes large areas for hunting; food comprises small terrestrial vertebrates, mud-fishes and chiefly crabs among arthropods.

## ANDAMAN DARK SERPENT EAGLE

### 33. *Spilornis elgini* (Blyth)

Slightly larger than the Great Nicobar Crested Serpent Eagle (50 cm in length).

Above dark chocolate-brown, with short brown crest; wings very long and pointed, primaries with brown bars; tail almost square with two pale bars and tipped, legs bare, short and yellow; lores and underparts dark amber brown spotted or ocellated with white over entire surface; iris bright yellow; bill pale horny to bluish horny, darker on culmen, cere and orbital region lemon-yellow; sexes alike.

An endemic species limited to the Andaman Islands.

Common, inhabits light wooded areas and forest clearings; food consists of frogs, lizards, rats and snakes.



*Spilornis eiginii* (Blyth) Male

## GREAT NICOBAR SERPENT EAGLE

### 34. *Spilornis klossi* Richmond

About the size of the Brahminy Kite (46 cm in length).

A light brown raptor with a black head and long nuchal crest covering the nape; ear-coverts and cheeks grey; wings short and rounded, primaries black with two dusky bars; tail with two bars; underparts unmarked buffy brown; iris yellow; bill base yellow, middle bluish and tip black; legs bare and long; cere and orbital skin yellow; sexes alike.

An endemic species limited to the Great Nicobar Island.

Common, keeps singly or in pairs in thick forest, perched on tall trees, unwary, hardly taking a flight unless quarry is sighted, food comprises lizards, rats, and small birds.

## OSPREY

### 35. *Pandion haliaetus* (Linnaeus)

About the size of the Pariah Kite (56 cm in length).

A fish-eating hawk, dark brown above; head white with dark streak through eye; underwing pale with prominent marks at bends; tail barred and squarish; underparts white with dark brown band across breast; iris yellow; bill black; legs short and stout with scales on the soles; claws black, rounded and strongly curved, female usually larger otherwise the sexes alike.

A very widely distributed species, almost cosmopolitan; represented by the nominate subspecies *P. h. haliaetus* (Linnaeus) within the Indian subcontinent including the Andamans in winter

Uncommon, met with singly near coastal lagoons and rivers, perched on tall trees in the vicinity of water; makes wide circles, occasionally diving down with wings practically closed, food comprises fishes; voice and calls — silent in its winter quarters.

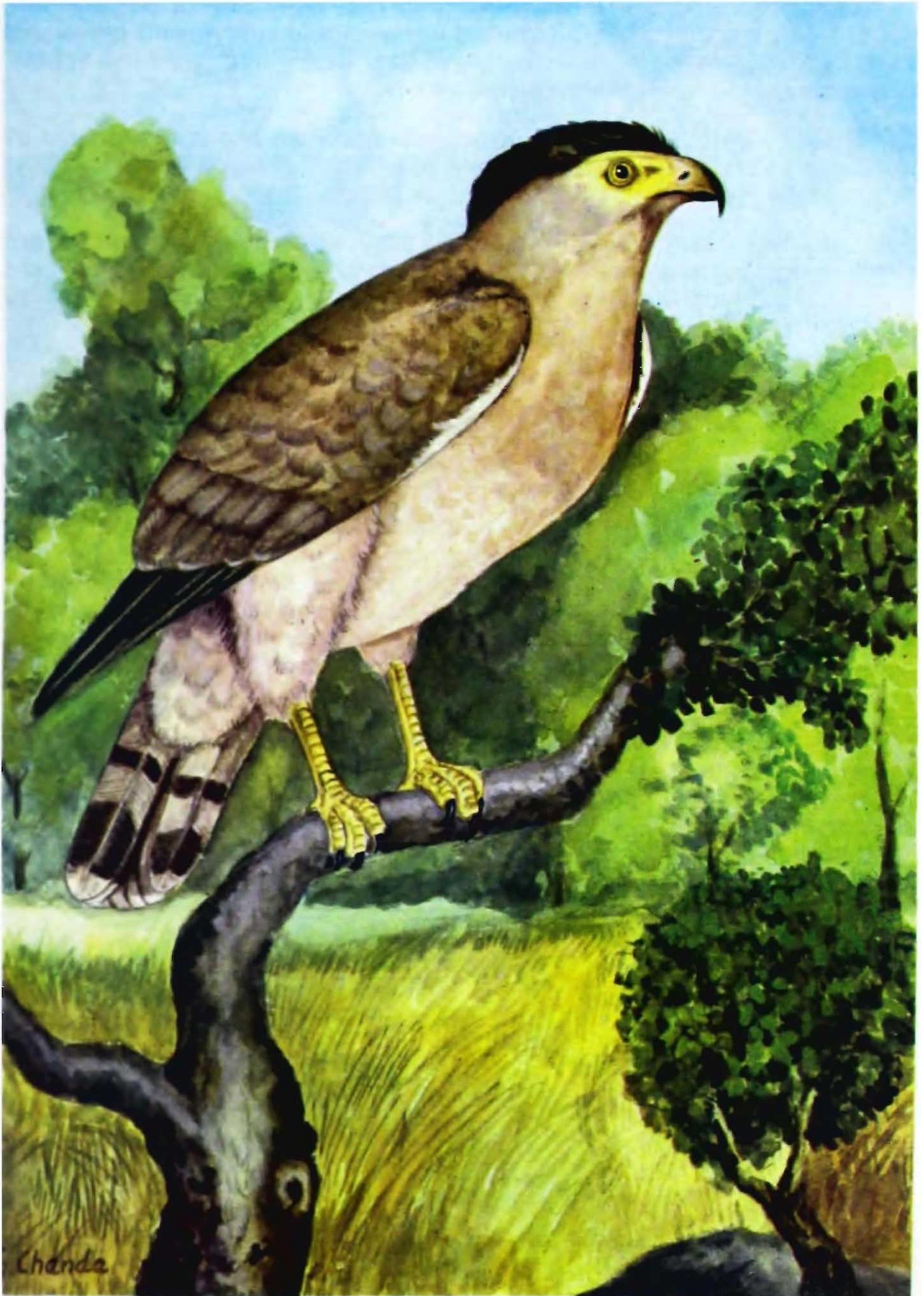
## Family 5. Falconidae

### PEREGRINE FALCON

### 36. *Falco peregrinus* Tunstall

Larger than the Kestrel (38-46 cm in length).

A powerful falcon, above slaty grey with black head and nape; wings broad, long, pointed, slaty grey; conspicuously dark moustachial stripes ending



*Spilornis klossi* Richmond Male

in a lobe; underparts pinkish white to rusty red, finely barred, tail dark grey, banded with blackish brown and tipped white; female substantially bigger and darker than the male; iris brown, bill bluish slaty, dusky at tip, yellowish at base; legs and feet stout and strong, chrome-yellow.

A widely distributed species, almost cosmopolitan and is represented by three subspecies within the Indian limits, of which *F. p. peregrinator* Sundevall occurs in the Nicobars. It is a resident of the Island.

Uncommon, seen singly in wild country perched on tree-tops, taking swift direct flight; wing beats alternate with glides, diving headlong with wings closed on the quarry; food comprises mostly birds.

## KESTREL

### 37 *Falco tinnunculus* Linnaeus

About the size of the domestic Pigeon but with larger tail (36 cm in length).

A small falcon, upperparts bright brick-red with black spots; head and neck grey, finely streaked with black, wings long, pointed, dark brown with white bars below; tail slaty grey with a black terminal bar and narrow white tip lower plumage vinous-buff, with narrow black streaks; breast and flanks spotted blackish, in female back mottled brown; head, upperparts and tail rufous brown, heavily barred with black; iris brown, bill slaty blue, black at tip; cere and orbital skin yellow; legs and feet, long and slender orange-yellow.

A widely distributed species extending from Europe to Asia and Africa. It is represented by three subspecies within the Indian limits, of which the nominate subspecies *F. t. tinnunculus* Linnaeus and *F. t. interstinctus* McClelland, occur in the Andaman as a winter visitor. The former differs from the latter in having the colour of the upperparts paler; the latter subspecies is darker and more heavily barred in both the sexes.

Uncommon; met with singly in hills and plains, perched on branches of trees; also often seen in the air; hovers frequently; food comprises largely insects, lizards or small mammals; voice and calls — silent outside the breeding season.

## Order V Galliformes

### Family 6. Megapodiidae

#### MEGAPODE

### 38. *Megapodius freycinet* Gaimard

Somewhat like a little undersized domestic hen in size (43 cm in length).

Above brown with olive tinge, the sides of head red and bare, underparts greyish brown, wings short and rounded, iris light to dark brown; bill greenish;



*Megapodius freycinet nicobariensis* Blyth. Male

legs and feet large, long, straight, greenish horny, darker in front and reddish on back and bear well-developed powerful claws; hind claw longest; sexes alike.

The species ranges from the Nicobars to Australasian region. The two subspecies which occur within the Indian limits are restricted to the Nicobar Islands. The Sombrero Channel separates the two subspecies, *M. f. nicobariensis* Blyth occupying northern Nicobar Islands (except Car Nicobar and Chowra Islands) and *M. f. abbotti* Oberholser the Great and Little Nicobar Islands. *M. f. abbotti* is darker than *M. f. nicobariensis* above and below and smaller in wing.

Inhabits moist tropical evergreen dense forests along sea-shore; generally found in pairs or in family parties; partially nocturnal; foraging in soil and leaf litters in the manner of a jungle fowl. Food comprises mainly arthropods, worms, snails and vegetable matter. Nests in the form of mound are built on ground under forest canopy where the jungle abuts on the coral beach. Mounds which are 1.5 m high and 10 or more in circumference are made of sand, shells, coral fragments, leaves, vegetable matter, humus, etc. The mound is a community breeding place, generally shared by several hens. The eggs are laid in holes scrapped by the hen in mounds and covered up, leaving them to hatch by the warmth generated by the decomposition of vegetable matter. The hen may remain near about the mound but no incubation is done by her. The chick emerging out of the egg is developed enough to run, fly and fend for itself.

A vulnerable species, has recently become rare due to habitat destruction and heavy exploitation for its flesh and eggs.

## Family 7 Phasianidae

### BLUEBREASTED QUAIL

#### 39. *Coturnix chinensis* (Linnaeus)

About the size of a fortnight-old domestic chicken, but shorter in the leg and very rotund in figure (14 cm in length).

A small dark quail, brown above, mottled with black, lower plumage bluish slaty grey with chestnut abdomen, vent and under tail-coverts; chin and throat black, encircled by a glossy white band, female similar but buff underneath, barred with black on breast and flanks; iris bright vermilion red to deep crimson in male, brown in female; bill black, legs and feet bright yellow.

A widely distributed species of South and East Asia extending through Indonesia to Australia, represented by two subspecies within the Indian limits, of which *C. c. trinkutensis* (Richmond) is endemic in the Nicobar group of Islands.

Uncommon, met with singly or in small parties in open grassland and cross fields; food consists of grass seeds and millets, also insects; voice and calls — a soft *tir-tir* when flushed.

Order VI Gruiformes

Family 8. Turnicidae

BUTTON QUAIL

40. *Turnix tanki* Blyth

About the size of the Bluebreasted Quail (15 cm in length).

A tiny, plump, greyish brown, quail-like bird with fine black vermiculations above; head rusty black with a median line; chin and throat whitish, rest of underparts pale buff, spotted with black on sides of rusty brown breast; female more bright, with rufous half-collar on back and sides of neck, larger iris pale straw to white; bill fleshy white; legs and feet yellow.

An extensively distributed species of South, Southeast and East Asia, represented by two subspecies within the Indian limits. The nominate subspecies *T. t. tanki* Blyth is resident in the Bay Islands.

Common, affects grassland and crop field, food comprises grass seeds; lays egg from June to September in a natural hollow in the ground, the clutch consists of four eggs; voice and calls — a loud drumming *drr-r-r-r-r*

Family 9. Rallidae

BLUEBREASTED BANDED RAIL

41 *Rallus striatus* Linnaeus

About the size of the Myna (27 cm in length).

A short-tailed waterhen like marsh bird crown to hindneck chestnut, remainder of upperparts dark brown, marked with wavy white bands and patched with black; chin and throat whitish, breast grey; underparts blackish, barred with white; female duller with streaked black head and whitish underparts; iris dark brown, bill stout, partly bright red, tips horny brown, legs and feet dark greenish horny.

An extensively distributed species, ranging from India to southern China, Taiwan and Indonesia. It is represented by two subspecies of which *R. s. obscurior* (Hume) is endemic in the Andaman and Nicobar Islands.

Common, frequents marshes and reedy swamps and also cultivated lands; food comprises wild seeds, aquatic grass, arthropods, worms, molluscs and crustaceans; breeds from May to June; nests on swampy ground, clutch consists of six eggs; voice and calls — a sharp low whistle.

## ANDAMAN BANDED CRAKE

### 42. *Rallina canningi* (Blyth)

Slightly larger than the Whitebreasted Waterhen (34 cm in length).

A short-tailed waterhen like marsh bird, upper plumage and breast ruddy chestnut; underparts whitish, barred with dark brown; iris scarlet; bill short, light green, legs and feet olive green; toe without claw; sexes alike.

As far as known, the species is confined to the Andaman Islands.

Common; affects marshes, skulking among thick bushes and reeds of salt marshes, forages among thick reeds; food comprises aquatic as well as terrestrial insects, fishes, small invertebrates including molluscs; nests among decaying leaves of reeds and clusters of grass under shady canopy in June and August; the clutch consists of 4 to 8 eggs; voice and calls — a deep croak *kroop-kroop*.

## BAILLON'S CRAKE

### 43. *Porzana pusilla* (Pallas)

About the size of the Quail (19 cm in length).

A small rail, olive brown above, streaked black with white paint-like flecks; a brownish streak through the eyes; supercilium, face, breast and upper abdomen grey; rest of underparts barred dark brown and white; iris red, bill horny green, darker at tip and on culmen; legs and feet yellowish green to dullgreen; sexes alike.

An extensively distributed species, found in Europe, temperate and tropical Asia and Africa. The nominate subspecies *P. p. pusilla* (Pallas) is found in the Indian mainland, and in winter in the Andaman Islands.

Not uncommon in suitable locality in brackish and freshwater swamps supporting reeds and aquatic vegetation; met with singly or in pairs, skulking among thickets or among large mass of decayed aquatic plants and live floating vegetation, food comprises seeds of marshy plants, aquatic arthropods and molluscs.

## WHITEBREASTED WATERHEN

### 44. *Amaurornis phoenicurus* (Pennant)

About the size of a half-grown domestic hen (32 cm in length).

A slaty black rail with the face and underparts from throat to abdomen white; under tail-coverts reddish brown, stub-tailed, iris crimson in adult; bill short, swollen at base, upper mandible red at base, rest of the bill light green; legs and feet yellowish green, sexes alike.



*Rallina canningi* (Blyth) Male above and female below

A widely distributed species of South and Southeast Asia which include the Indian subcontinent, southern China, Indonesia and Taiwan. The species is represented by two subspecies within the Indian limits, of which *A. p. insularis* Sharpe is confined in both the groups of islands.

Common, a bird of swamps of fresh and brackish waters; found singly or in pairs, skulking among reeds, grasses, shrubs and among mangrove swamps; forages in marshes, and in undisturbed pools containing aquatic vegetation; food consists of animal and vegetable matters, comprising seeds and tender shoots of marshy plants, small aquatic arthropods, molluscs, etc; breeds with the commencement of monsoon, nesting among reeds and shrubs above water margin, nest material comprises aquatic grassblades and leaves; clutch consists of four eggs; voice and calls — a loud roar to a chuckling noise.

## KORA

### 45. *Gallicrex cinerea* (Gmelin)

About the size of a domestic hen; larger than the whitebreasted Waterhen (male 43 cm, female 36 cm in length).

Breeding male black, with grey scaly markings above; crown bears a red fleshy horn shield pointing posteriorly; bill stout, long and bright red at base, yellow at tip; legs and feet dull to bright red, female and non-breeding male dark brown above, buffy brown below with wavy chocolate-brown fine streaks; forehead bears a small yellowish horny shield, female considerably smaller than the male; iris yellow; bill yellowish; legs and feet dull greenish brown.

Widely distributed resident species of the South, East and Northeast Asia which include the Indian subcontinent and the Andaman and Nicobar Islands.

Common, affects swamps and pools containing aquatic vegetation; crepuscular but emerges during the daytime when sky is overcast with clouds; quite shy, takes to hiding with the least alarm; during breeding season pugnacious; forages in reedy swamps, marshes and cultivated crop field, food largely vegetable matter comprising grass seeds, paddy, green shoots and also aquatic arthropods, worms, molluscs etc., breeding period coincides with the monsoon period, nests in reed-beds, nesting material comprises aquatic plants, leaves and grass blades; the normal clutch consists of three to six eggs; voice and calls — a resonant deep throated *toog-toog-toog*.

## MOORHEN

### 46. *Gallinula chloropus* (Linnaeus)

About the same size as the Whitebreasted Waterhen (32 cm in length).

A slaty brown rail with the head and neck black, merging into brown-olive on back, edges of the closed wings finely bordered with white; breast slaty grey, under tail-coverts conspicuously white; iris red; frontal shield of the head



*Amaurornis phoenicurus insularis* Sharpe. Male.

and base of the bill bright red, rest of the bill greenish yellow; orange-red ring above leg joint; legs and feet light green; sexes alike.

A widely distributed species throughout Europe, America, Asia and India east to the Philippines. It is represented by two subspecies within the Indian limits. The subspecies *G. c. orientalis* Horsfield is resident in the Andamans. It differs from the subspecies *G. c. indica* Blyth in having the frontal shield wider, extending back on the forehead.

Its general habits, food, voice and calls have not been recorded.

## PURPLE MOORHEN

### 47 *Porphyrio porphyrio* (Linnaeus)

About the size of a village hen (43 cm in length).

A squat purplish-lilac bird with a deep red casque covering the crown; sides of head grey; breast and underparts bluish with purple lilac; under tail-coverts white; iris deep red, bill thick, short, compressed and red; legs and feet red, sexes alike except that the female bears a smaller frontal shield.

An extensively distributed species of the Old World, found in Africa through southern Europe to tropical Asia extending to Indonesia and Australasia. It is represented by the subspecies *P. p. poliocephalus* (Latham) as a resident in the Indian subcontinent including the Andaman and Nicobar Islands.

Uncommon; affects large swamps, marshes and pools having plenty of submerged and aquatic vegetation and marginal reed-beds; constantly jerks its stumpy tail while it walks; food comprises wild grass, cultivated cereals, and other vegetable matter also arthropods, worms and molluscs; breeding period coincides with the monsoon period, the normal clutch consists of three to ten eggs; nests in reed beds; nesting material comprises aquatic plant leaves and grass blades; voice and calls — a noisy cackle vibrant.

## Order VII Charadriiformes

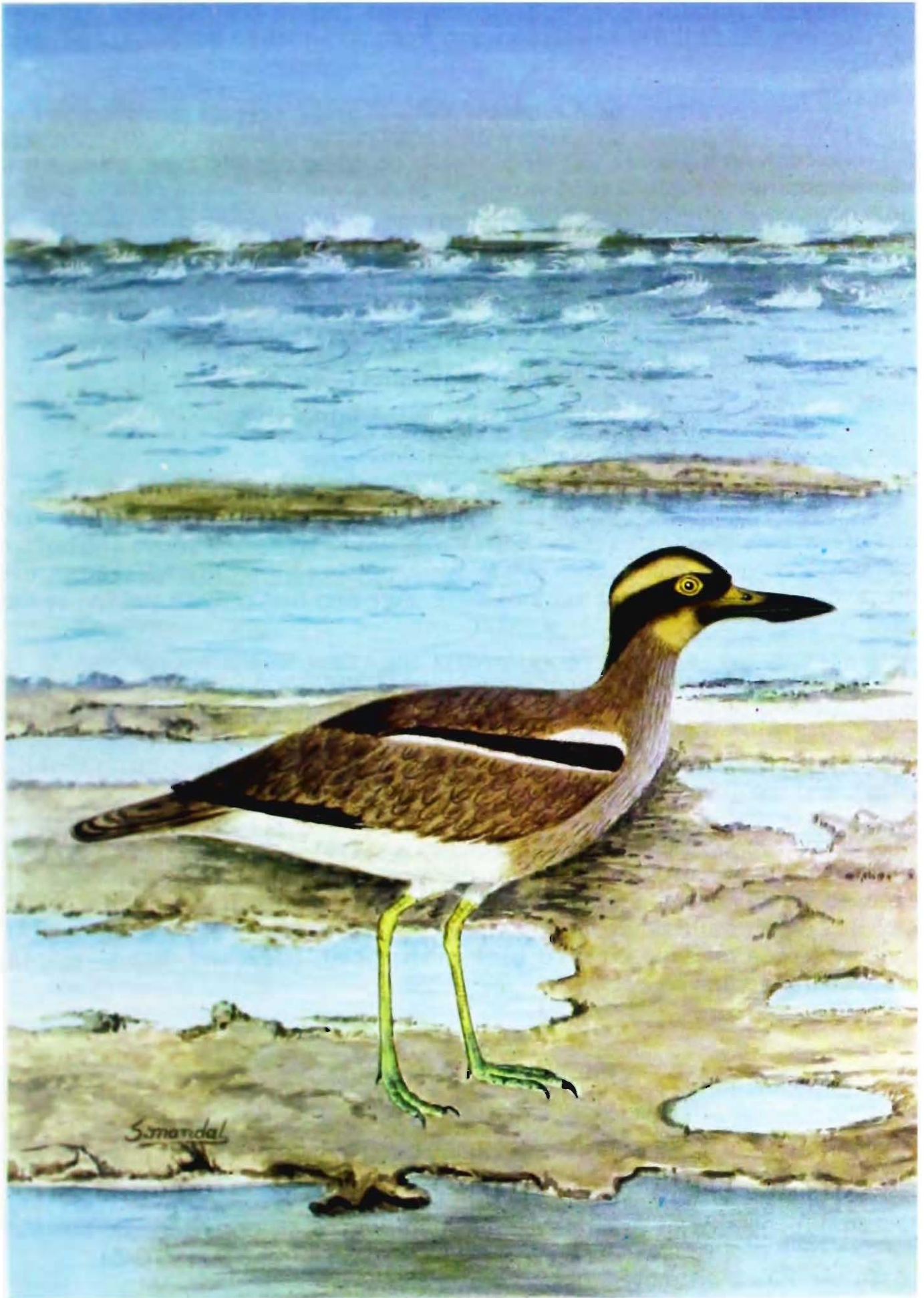
### Family 10. Dromadidae

#### CRAB PLOVER

### 48. *Dromas ardeola* Paykull

About the size of the Whimbrel, but with longer legs (41 cm in length).

A large-headed maritime wader with overall white plumage; back and quills black, a small black patch around the eye; the heavy black tern-like bill; slightly graduated, almost square tail differentiate the bird from other waders like the avocet, stilts, etc. Iris brown, bill black, legs and feet pale glaucous blue; sexes alike.



*Esacus magnirostris magnirostris* (Vieillot). Male.

Widely distributed species from the Red Sea to the Persian Gulf and northern shores of the Indian Ocean, and from Sri Lanka to the Bay Islands and Malaya.

Uncommon, affects tidal mudflats and estuaries; keeps in small parties or large flocks. Usually very shy. Flies with somewhat tern-like action, the long legs extended behind the short tail; feeds chiefly on crabs but also takes other small marine organisms such as sand-worms, molluscs, etc., voice and calls — a shrill note *chuk-chuk* when at nest-holes.

## Family 11 Burhinidae

### GREAT STONE PLOVER

#### 49. *Esacus magnirostris* (Vieillot)

About the size of a village hen (57 cm in length).

A large headed plover greyish sandy brown above, white below; throat and breast pale grey; sides of the head black, with a white line above and below the eye; primaries black, with white wing patches; iris chrome yellow; bill massive, black, yellowish at extreme base; legs and feet greyish yellow; sexes alike.

An extensively distributed species of the Oriental and Australian regions. It is represented by two subspecies within the Indian limits of which the nominate subspecies *E. m. magnirostris* (Vieillot) is resident in the Andaman Islands. It differs from *E. m. recurvirostris* (Cuvier) of northeastern India in being slightly larger and the culmen almost straight instead of upcurved.

Uncommon, frequents coastal beaches and reef in pairs or in small parties, sometimes in association with crab plovers; very active while foraging on exposed sandy and muddy flats; food consists of ground frequenting insects, molluscs, worms and other small animals; lays one or two creamy white eggs in shallow scrape on exposed sand bank in river bed, voice and calls — a long drawn harsh tone *wee-wee*.

## Family 12. Glareolidae

### COLLARED PRATINCOLE

#### 50. *Glareola pratincola* (Linnaeus)

About the size of a Whiteheaded Myna but with long, narrow, pointed wings which project well beyond the tail when folded (24 cm in length).

A short-legged swallow-like black-tailed bird with white base; above olive brown, rump patch white; chin and throat creamy, narrowly bordered with

black, abdomen rufous buff fading to white; iris dark brown, bill black, reddish at gape, legs dusky black, sexes alike.

The species is found in the Mediterranean region, Africa, eastern Asia and the Indochinese subregion, migrating to Australia. The subspecies *G. p. maldivarum* J. R. Forster with tail not deeply forked, occurs in the Andaman and Nicobar Islands during winter months.

Affects tidal creeks, keeps in flocks of approximately 200 birds. Most active in the mornings and evenings, flying high up in the air like swallows, hawking flying insects but at other times more suggestive of a sandpiper or a tern, voice and calls — a short *krrre, krrre* on flight.

### Family 13. Charadriidae

#### GREYHEADED LAPWING

#### 51 *Vanellus cinereus* (Blyth)

About the size of a small domestic pigeon, but with long legs (37 cm in length).

A long-legged plover with light brown upper plumage; tail white with a broad black subterminal band, a white band on the secondary wing-quills; entire head grey; neck and breast ashy grey, terminating in a broad chocolate and black pectoral band, rest of underparts white; iris red, bill basal two-thirds bright yellow, terminal third black; legs and feet bright yellow; sexes alike.

Widely distributed Palearctic species, wintering in southern China, eastern India, Burma, Malaysia and Indochinese countries. It has been recorded as a straggler in winter from the Andaman Islands.

Affects marshy places; food comprises insects, worms and molluscs; voice and calls — silent in winter

#### EASTERN GOLDEN PLOVER

#### 52. *Pluvialis dominica* (P.L.S. Müller)

About the size of the Pintail Snipe, but with much shorter bill and longer legs (24 cm in length).

In winter upperparts mottled brown and golden; head ashy grey; underparts whitish, with speckled brown breast; iris dark brown; bill black; legs and feet slaty grey; sexes alike.

The species is widely distributed in the New and Old World, extending from East Asia to North America, wintering in South America, Oceania, Australasia and South Asia. The subspecies *P. d. fulva* (Gmelin) is common in the Andaman and Nicobar Islands.

Frequently met with in large flocks; forages on mud-shores; food comprises largely aquatic as well as terrestrial arthropods and other tiny aquatic organisms, also seeds of marshy plants; voice and calls — a high pitched disyllabic *tu-ee* or *tee-tew* while takes off

## GREY PLOVER

### 53. *Pluvialis squatarola* (Linnaeus)

Smaller than the Greyheaded Lapwing (31 cm in length).

Above dark brown, conspicuously scalloped with pale brown; sides of head and neck white, streaked with brown; rump and tail white, narrowly barred with dusky brown, breast white, lightly spotted with pale brown; remainder of lower plumage white; a small hindtoe and claw present; iris dark brown; bill black; legs and feet dusky grey; sexes alike.

A Holarctic breeding species, wintering in southern latitudes. A common winter visitor in the Bay Islands.

Frequents muddy and sandy sea coasts, mudflats and sandbanks in the tidal zone; one of the greatest migrants among world's marshy birds, usually moves in flocks of five to twenty associated with other waders; food comprises insects, tiny molluscs and crustaceans; voice and calls — a shrill musical pipe *tu-ee* continued in flight.

## KENTISH PLOVER

### 54. *Charadrius alexandrinus* Linnaeus

Somewhat smaller than the Quail (17 cm in length).

A small shore-bird, sandy grey brown above with white forehead and a white collar on hindneck, supercilium white; underparts white with a small dark patch on each side of the breast; faint wing bar; central tail feathers brown and three outer pairs white; female duller; iris dark brown, bill black; legs and feet blackish.

A widely distributed species in the temperate and tropical belts of the Old World and New World but absent in North Asia; New Zealand and Oceania. A



*Pluvialis squatarola* (Linnaeus) Male and female.

single specimen has been recorded from Car Nicobar Nicobar group of Islands in winter

Uncommon, found in mixed flocks of waders to the sea-shore and also inland banks of creeks; food consists of small insects, sand-hoppers, and the like.

## SAND PLOVER

### 55. *Charadrius asiaticus* Pallas

About the size of half grown domestic fowl (19-24 cm in length).

In winter upper plumage including tail-feathers brown; forehead to sides of the neck above the eyes white; a brown patch behind the eye, chin, throat and belly white; breast brown; iris hazel; bill olive-brown; legs pale brownish flesh; feet washed with grey; sexes alike.

An extensively distributed species, found in Asia and Africa, breeding in the Caucasus, Mongolia and northern China, wintering in West Asia, East Africa, South and Southeast Asia. It is represented by two subspecies, of which *C. a. veredus* Gould has been recorded from the Andamans as a vagrant.

Affects sea coast and mudflats; food consists of small crabs, sandhoppers and marine worms.

## LITTLE RINGED PLOVER

### 56. *Charadrius dubius* Scopoli

A diminutive plover of the size of the Kentish Plover (17 cm in length).

In winter sandy brown above; forehead white with a black forecrown; ear-coverts black, collar black, narrow at nape and broad on breast and hind collar; narrow white stripe separates ear-coverts from crown and sandy nape, and forms a white collar on nape above the black collar; remainder of underparts white; iris brown, bill black, short, yellow at base of lower mandible; legs greenish-yellow; sexes alike.

An extensively distributed species of the temperate and tropical Eurasia and Africa, represented by two subspecies within the Indian limits of which *C. d. curonicus* Gmelin is found in the Andaman Islands.

Common; affects shores and mudflats; generally keeps in pairs or small flocks actively moving about taking quick steps before a stop to forage on exposed flats; food comprises mostly aquatic and terrestrial arthropods, worms, etc., voice and calls — a monowhistle *phiu* or *pheoo* continued in flight.



*Charadrius dubius curonicus* Gmelin. Male and female.

## LARGE SAND PLOVER

### 57 *Charadrius leschenaultii* Lesson

Between the Eastern Golden Plover and the Lesser Sand Plover in size (22 cm in length).

In winter ashy brown above; forehead fulvous white; lores, brown, ear-coverts brownish, conspicuous as a brown spot behind the eye; underparts white with a brown band across breast; iris brown, bill black; legs and feet dusky greenish to olive-slate; sexes alike.

The species breeds in northern Asia, winters from southern Africa through southern Asia to Australia and Solomon Islands. The nominate subspecies *C. l. leschenaultii* Lesson visits the Indian subcontinent including the Bay Islands.

Common, affects sandy beaches; gregarious, keeps in small parties or large flocks, usually in association with lesser sand plover and other waders; food consists of small ground insects, crustaceans and worms; voice and calls — silent in winter

## LESSER SAND PLOVER

### 58. *Charadrius mongolus* Pallas

About the size of the Common Sandpiper, (19 cm in length).

In winter greyish brown above; forehead buffy white; face white, divided by a dark patch behind eyes; secondaries edged and tipped white; shaft of outer tail-feathers white; no white ring on hind neck, below whitish, iris dark brown, bill short and black; legs and feet fleshy grey yellowish, sexes alike.

An extensively distributed species of Central, East and Northeast Asia, migrating to East Africa, South and Southeast Asia and Australia. The subspecies *C. m. atrifrons* Wagler is found in the Andaman and Nicobar Islands.

Common, affects sea coasts and tidal creeks, often mixed with other waders; very active while foraging on exposed sandy and muddy flats; food comprises small marine organisms; voice and calls — a low *trr* when flushed, otherwise silent.

## CURLEW

### 59. *Numenius arquata* (Linnaeus)

About the size of a large country hen (58 cm in length), with long, downcurved bill.

A darkish sandy brown hen-sized wader streaked with black and fulvous above, lower back and rump white; tail white, barred blackish brown, chin



*Numenius arquata orientalis* C L Brehm Male.

white; throat, breast and flanks pale whitish buff, streaked blackish, less streaked and purer white towards vent; iris brown, bill long, dark brown, strongly decurved, fleshy brown on basal half; legs and feet bluish-grey; sexes alike.

A Palearctic species, wintering in southern Europe, Africa and southern Asia. It is represented by two subspecies within the Indian limits, of which *N. a. orientalis* C.L. Brehm occurs in the Andaman and Nicobar Islands during winter. It differs from the nominate subspecies *N. a. arquata* (Linnaeus) being slightly lighter in colour and with longer culmen.

Common, haunts the oceanic flats of the islands in large flocks; forages on mud shores in mixed flocks of the Whimbrel. Feeds on marine worms, shellfish and crustaceans, probing into mud, voice and calls — a shrill musical *coor-lee*.

## WHIMBREL

### 60. *Numenius phaeopus* (Linnaeus)

Smaller than the Curlew (43 cm in length).

A wading bird, upperparts sandy brown, marked with whitish spots; forehead and crown dark brown with a white median band, supercilium long and white; eye-stripe dark brown, lower back white; upper tail-coverts white, streaked blackish; chin, throat and abdomen white; breast streaked brown; flanks marked brown; iris brown; bill long and strongly decurved, horny brown; legs and feet green-grey; sexes alike.

A widely distributed species of the Holarctic, wintering in South America, Africa and Indo-Australian region. It is represented by two subspecies within the Indian limits including the Bay Islands. The nominate subspecies *N. p. phaeopus* (Linnaeus), visits the Andaman and Nicobar Islands and *N. p. variegatus* (Scopoli), the Narcondam Island in winter. The subspecies *variegatus* differs from *phaeopus* in being much darker and browner with the dark bars in the upper plumage and the streaks on the lower plumage much heavier; under tail-coverts broadly barred and streaked with brown.

Affects the estuarine flats and sea-shores congregating on the tidal lines; gregarious, moving and foraging in mixed flocks of curlew and other waders, running about in search of holes in sandy and mudflats extricating crabs from holes; also feeds on other crustaceans, molluscs, etc., voice and calls — a musical rippling *tetti, tetti, tetti, tet*.

## BARTAILED GODWIT

### 61. *Limosa lapponica* (Linnaeus)

About the size of the Whimbrel, but with longer straight or very slightly upcurved bill (36 cm in length).



*Numenius phaeopus phaeopus* (Linnaeus). Male.

A largish wader with streaked sandy brown plumage, and very long upcurved bill, pinkish at base and dark at tip; upper tail-coverts white, the longer ones barred black, tail barred black and white; underparts white, with a pale brown wash on breast; iris brown, legs and feet greenish grey to almost black; sexes alike.

A Holarctic breeding species, wintering in Africa, Asia and Australia. It is represented by two subspecies within the Indian limits, of which *L. l. baueri* Neumann occurs in the Nicobar Islands as a winter visitor. It differs from the nominate subspecies *L. l. lapponica* (Linnaeus) in being larger.

Uncommon, generally seen singly but sometimes in large parties; wades in shallow water probing the mud deeply with its long bill in search of worms, crabs, and other small animals which form its food.

## WOOD SANDPIPER

### 62. *Tringa glareola* Linnaeus

Slightly smaller than the Green Sandpiper (21 cm in length).

A slender greyish brown sandpiper spotted with white above; rump and tail white, the latter barred blackish; supercilium white; underparts white, with brownish wash, and spotted on lower throat and upper breast; underwing white, thinly barred black, iris brown; bill black; legs and feet olive-green; sexes alike.

A Palaearctic breeding species, migrating to Africa and southern Asia as far as the Philippines and Australia. Begins to arrive in India including the Andamans in early August and stays on till mid-May.

Common, haunts the coastal backwaters of the islands; gregarious, prefers to remain solitary or in small parties; food like other sandpipers; voice and calls — loud *chip, chip, chip, chip*.

## COMMON SANDPIPER

### 63. *Tringa hypoleucos* Linnaeus

Slightly smaller than the Snipe (21 cm in length).

A small-sized sandpiper olive-brown above, white below, with a faint diffuse dusky band across breast; supercilium white; rump and tail brown, the latter tipped white; also faintly barred with white on the outer feathers; iris dark brown, bill long, straight, horny brown, greyer at base of lower mandible; legs and feet greenish grey; sexes alike.

A Palearctic species, in winter ranging from Africa through southern Asia to Australia. It occurs in India including the Andaman and Nicobar Islands in winter

Common, affects coastal lagoons, tidal creeks and mangrove; keeps solitary; food consists of insects and their larvae, sand-hoppers, freshwater shrimps, etc., voice and calls — a shrill piping *twee-we-we* when flushed.

## GREENSHANK

### 64. *Tringa nebularia* (Gunnerus)

Slightly larger and leggier than the Common Redshank (36 cm in length).

A solitary wader dark greyish brown above, crown and nape finely streaked with brown, forehead, lower back, rump and underparts white; tail white, barred with brown; breast slightly spotted and streaked, iris brown, bill long, slightly uptilted, dark horny brown, blackish at the tip; legs and feet yellowish green, sexes alike.

A Palearctic breeding species, winters in the Mediterranean, throughout Africa, southern Asia and Australia, occurs in India including the Bay Islands.

Found commonly in small parties, associated with Redshanks on the coastal lagoons; usually wades in water up to the belly and feeds with head and neck fully submerged, often bobs the head up and down when suspicious; food consists of insects, worms and molluscs; voice and calls — a shrill piping note *tiu-tiu-tiu* when flushed.

## GREEN SANDPIPER

### 65. *Tringa ochropus* Linnaeus

About the size of the Snipe (24 cm in length).

A dark greenish-bronze sandpiper with contrasting white rump; tail white with terminal black bars; lowerparts white; breast streaked with brown, under wings brown, closely barred white; iris brown, bill dusky green, blackish at the tip; legs and feet dull greenish brown, sexes alike.

A Palearctic breeding species, wintering in Africa, and southern Asia as far as the Philippines. A winter visitor to the Indian subcontinent including the Andaman Islands.

Common, keeps singly or in pairs; frequents jheels and casual flood-water but less common on the mudflats and tidal creeks of the coast; less gregarious than many sandpipers; feeds mostly on worms, tiny molluscs, crustaceans and insects and their larvae; voice and calls — a shrill piping note *ti-tui* when flushed.

## TEREK SANDPIPER

### 66. *Tringa terek* (Latham)

Slightly larger than the Common Sandpiper (24 cm in length).

A short-legged, longish sandpiper greyish brown above including rump and upper tail-coverts, with dark shaft-stripes; forehead and supercilium white; remainder of lower plumage white with faint streaks on throat; iris brown; bill black, slender upturned and yellowish at base; legs and feet dull yellow to orange-yellow; sexes alike.

A Palearctic species, wintering in Africa, southern Asia and Australia. In the Andaman and Nicobar islands it occurs during winter

Prefers mangrove swamps and tidal creeks; keeps in small flocks of 10 to 15 birds; seen actively racing after live food on the sea-shore; food consists of insects, sand-hoppers and tiny molluscs; voice and calls — a mellow whistle *tw-eeweewit* when flushed.

## COMMON REDSHANK

### 67 *Tringa totanus* (Linnaeus)

Larger than the Wood Sandpiper but smaller than the Greenshank (28 cm in length).

A large-sized sandpiper uniformly greyish brown above; rump and tail white, the latter barred with brown, underparts white, with streaked breast; secondaries broadly tipped white; iris brown, bill black, orange reddish on basal third, legs and feet orange, sexes alike.

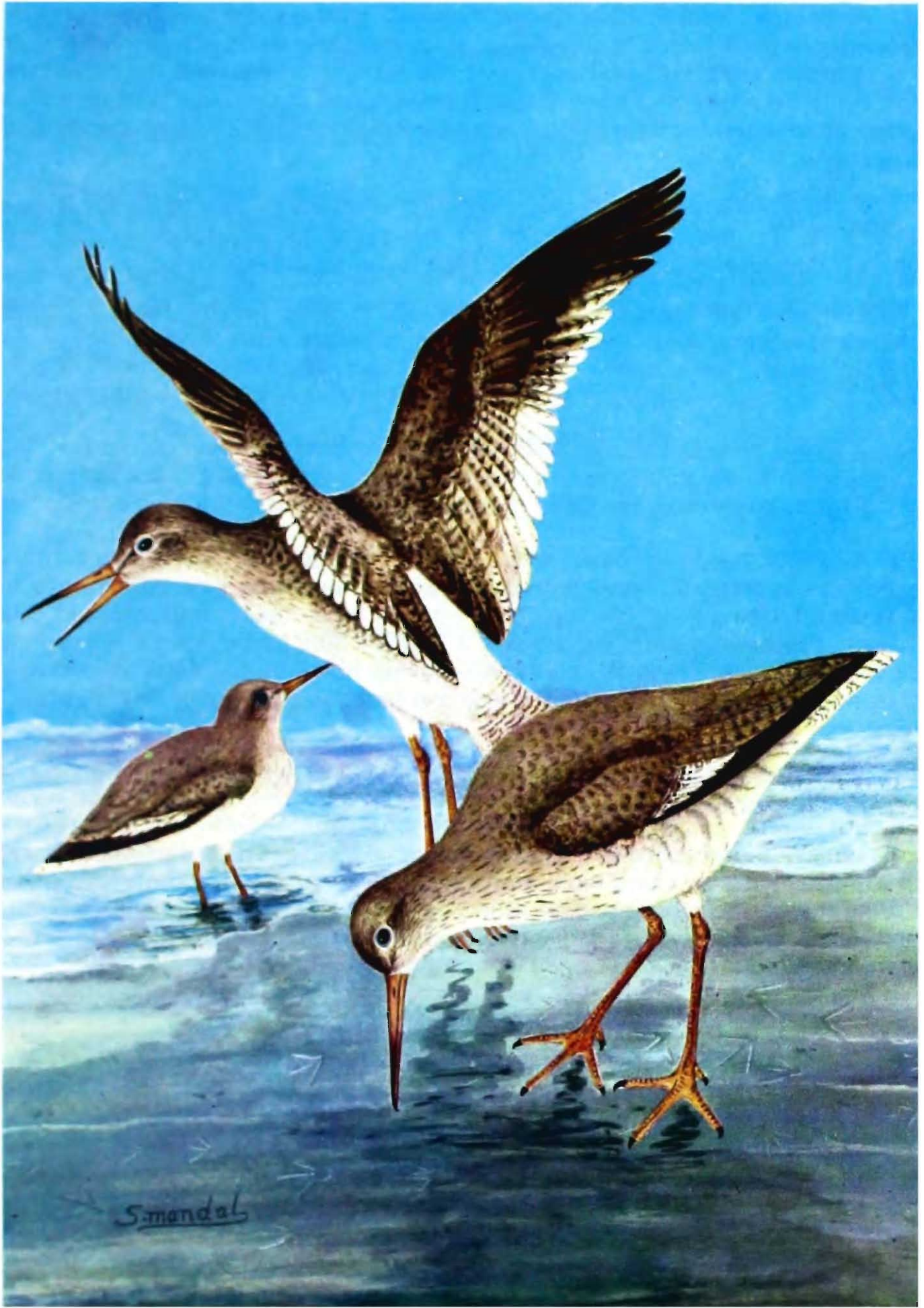
An extensively distributed species, breeds throughout the Palearctic region south to Kashmir wintering in southern Europe and Southeast Asia. The nominate subspecies *T. t. totanus* (Linnaeus) is common in the Bay Islands.

Solitary; usually seen feeding in inland streams with other waders; food consists of molluscs, crustaceans, worms and aquatic insects; voice and calls — double-noted musical *tiweet, tiweet*.

## TURNSTONE

### 68. *Arenaria interpres* (Linnaeus)

About the size of the Wood Sandpiper but more stoutly built and with shorter legs (22 cm in length).



*Tringa totanus totanus* (Linnaeus) Male and female

A dampy wader dark brown above, feathers fringed pale brown, secondaries tipped white, lower back, rump, and tail-coverts white, the last with a dark brown cross-bar; tail dark brown, tipped with whitish and the outermost pair white, foreneck and sides of breast brown, rest of underparts white with a dark interrupted pectoral band, iris brown, bill black, legs and feet orange-red sexes alike.

A Holarctic breeding species, migrating southwards during winter over a large area. The nominate subspecies *A. i. interpres* (Linnaeus) haunts the coast of the Indian Union including the Bay Islands during winter

Common, affects rocky sea coast; keeps in small parties, feeds on small crabs and worms, voice and calls — a metallic twitter when flushed.

### FANTAIL SNIPE

#### 69. *Gallinago gallinago* (Linnaeus)

Slightly larger than the Quail (27 cm in length).

A marsh-haunting bird, with straight slender bill, marked with dark brown on upperparts, finely barred reddish buff and with pale buff fringes to scapulars forming a double line down sides of back, breast buff, mottled pale brown, supercilium buff; head bears a median buff stripe; flanks indistinctly barred with black, iris dark brown, bill yellowish horny on basal half dark horny brown to blackish on terminal half; legs and feet dull olive-green, sexes alike.

The species breeds in Europe and western Asia and migrating south to Africa, India and Sumatra. The nominate subspecies *G. g. gallinago* (Linnaeus) is a regular visitor to the Andamans.

Usually found solitary; frequents the same localities as the pintail; flies off in a zig-zag manner rising high, and then settles in a suitable spot; less active during the hot hours of the day; food comprises largely of aquatic arthropods and other tiny aquatic organisms; voice and calls — a harsh *pench* when startled and repeated nasal *scape* in flight at intervals.

### GREAT SNIPE

#### 70. *Gallinago media* (Latham)

About the size of the Fantail Snipe (28 cm in length).

Similar to *Gallinago gallinago* (Linnaeus) (No. 69) but considerably larger and robust in build, darker and more heavily barred below; outer tail-feathers more white; sluggish in flight and is without the characteristic *pench* as it flushes; iris dark brown, bill brown, legs and feet dusky plumbeous, sexes alike.

A Palaearctic species, winters in Africa. It has been recorded once from the Andaman as a vagrant.

## JACK SNIPE

### 71 *Gallinago minima* (Brunnich)

Smaller than the Fantail Snipe (21 cm in length).

Similar to *Gallinago gallinago* (Linnaeus) (No. 69) but considerably smaller with comparatively shorter and stouter bill and much amount of glossy green-blue sheen on fringes of feathers of upper plumage; tail with central feathers slightly elongated and pointed, lacking Fantail's whitish tip of outer rectrices; iris dark brown, bill black to horny brown; legs and feet pale olive-green; sexes alike.

A Palearctic species, migrating south to Africa, the whole of the Mediterranean belt and Iran to India including the Andamans.

Not too common, prefers the swampy marginal zone around jheels; feeds on worms, insects and certain seeds of swamp-plants; sluggish in flight and is without the characteristic *pench* as it flushes.

## PINTAIL SNIPE

### 72. *Gallinago stenura* (Bonaparte)

Closely resembles the Fantail Snipe in size (27 cm in length).

Similar to *Gallinago gallinago* (Linnaeus) (No. 69) but slightly darker with a very long straight bill, tail with 26 feathers of which the outer eight on each side are very narrow, pin-like and stiff; iris brown, bill black to horny brown, legs pale-olive green, sexes alike.

The species breeds in East Siberia south to Tibet; winters in China, India including the Bay Islands, Indonesia and the Indochinese subregion.

Common, affects swamps of the island, forages on mud-shores; food comprises largely aquatic arthropods and other tiny aquatic organisms; voice and calls — similar to that of the Fantail Snipe (No. 69).

## WOODCOCK

### 73. *Scolopax rusticola* Linnaeus

About the size of the Pigeon, but with a long bill (36 cm in length).

A large snipe; mottled brown and buff, with dark transverse bars on back of head and nape; tail-feathers black, with dark grey above, silvery white below;

chin white; rest of underparts brownish-white, cross-banded with dark brown, iris deep brown, bill horny brown, long, straight, grooved at the sides and pitted at tip; legs and feet greenish grey; sexes alike.

A Palaearctic breeding species as far south as the Himalayas and Japan, winters in northern Africa, India and Indo-chinese countries. The nominate subspecies *S. r. rusticola* Linnaeus has been recorded once as an accidental straggler from South Andaman (Port Blair).

Affects swampy glades, keeps solitary or in pairs, never in flocks; prefers damp woods and dense undergrowth where it can probe for worms, its favourite food.

## SANDERLING

### 74. *Calidris alba* (Pallas)

Slightly smaller than the Snipe (19 cm in length).

A plum little shore-bird with upperparts grey; forehead, lores, face and underparts white; greater coverts blackish with broad white ends; hind-toe absent; iris brown, bill, legs and feet black; sexes alike.

The species breeds in the Northern Hemisphere from Europe to Siberia and close to the Arctic Circle, and migrating south to the Equator. Fairly common winter migrant to the coasts of India and Car Nicobar. Nicobar group of Islands.

Prefers sandy, muddy beaches; feeds on small marine animals; voice and calls — a shrill liquid *wick-wick* when flushed.

## LITTLE STINT

### 75. *Calidris minuta* (Leisler)

About the size of the Quail (15 cm in length).

The smallest wader: upperparts 'scaly' grey-brown; forehead and supercilium white, quills blackish brown with white shafts; secondaries white at base; rump and upper tail-coverts blackish brown, outer tail-feathers light smoky brown, underparts white with faintly streaked breast; iris brown, bill black; legs and feet dark brown, sexes alike.

The species breeds in northern Europe and Siberia, migrates south to India including the Andamans.

Fairly common on the seashores, forages on mud flats, running with quick business, food consists of aquatic forms of life; voice and calls — a soft musical twitter

## EASTERN LITTLE STINT

### 76. *Calidris ruficollis* (Pallas)

Slightly larger than the Little Stint (16 cm in length).

General colour in winter resembles that of *Calidris minuta* (Leisler) (No. 75), but upperparts greyer with a shorter and blacker tarsus; iris dark brown, bill and legs blackish, sexes alike.

A Palaearctic species, wintering in the Oriental region east to Australia, a rare visitor in the Andaman and Nicobar Islands.

## LONGTOED STINT

### 77 *Calidris subminuta* (Middendorff)

Same as the Little Stint in size (15 cm in length).

A small wader dark brown above, the feathers with light brown edges; lower back, rump, upper tail-coverts and middle tail-feathers blackish, outer tail-feather greyish brown, a narrow white bar across the wing; rest of lower plumage white; foreneck and neck greyish with dark shaft-streaks; iris brown, bill olive-brown to blackish, paler at base of the lower mandible; legs and feet pale olive-yellow to pale brown, sexes alike.

A Palaearctic species, wintering in eastern Asia up to the Philippines, also common in the Andaman Islands.

Usually occurs in mixed flocks with Little Stints on inland marshes and tidal mudflats, energetically running on sand to pick up tiny insects, worms and crustaceans which comprise its food, voice and calls — a musical twitter

## TEMMINCK'S STINT

### 78. *Calidris temminckii* (Leisler)

Same as the Little Stint in size (15 cm in length).

A diminutive wader distinguished from similar *Calidris minuta* (Leisler) (No. 75) by uniform grey-brown colour less mottled above and less pearly white below; outer tail-feathers white instead of smoky brown, yellowish green legs instead of greenish black; shaft of the 1st primary white, rest brown instead of all white; iris brown, bill black, sexes alike.

A Palaearctic species, wintering in Mediterranean area, Africa, Middle-East and southern Asia, common in the Andaman Islands.

Gregarious, common in the same habitat as the Little Stint; feeds communially with other waders; food consists of insects, crustaceans and seeds; voice and calls — a trilling whistle on flight.

#### EASTERN KNOT

##### 79. *Calidris tenuirostris* (Horsfield)

Larger than the Little Stint (29 cm in length).

Above light brownish grey, boldly streaked with black; lower back, rump and upper tail-coverts dark brown, with white edges to the feathers, broadly on the last, making the feathers sometimes almost all white; tail ashy brown, lower plumage white; foreneck and upper breast streaked or spotted with dark brown, iris dark brown, bill brownish black, legs and feet greenish dusky; sexes alike.

The species breeds from central Siberia to Japan, winters in the Oriental region up to Australia. A winter visitor to the Andamans in small numbers.

Common, frequents the sea-shore and mud flats; feeds on worms, insects etc., voice and calls — a musical twitter

#### CURLEW-SANDPIPER

##### 80. *Calidris testacea* (Pallas)

Slightly smaller than the Snipe (20 cm in length).

In winter greyish brown above, with dark shaft-stripes; secondaries white at the base; lower back and middle of rump dark brown, upper tail-coverts white; tail ashy brown, throat, belly and under tail-coverts white; breast streaked grey; iris brown, bill black, legs and feet dark grey to black, sexes alike.

A Palaearctic breeding species, wintering from Africa to Australia through southern Asia. Arrives in August in the Bay Islands and leaves in May.

Common, affects sea-shore, mudflats and marshes; keeps in small flocks, usually mixed with stint, sand plovers, and other waders; feeds on tiny insects, worms and crustaceans, voice and calls — silent in winter

## BROADBILLED SANDPIPER

### 81 *Limicola falcinellus* (Pontoppidan)

Between the Little Stint and the Curlew-Sandpiper in size (17 cm in length).

A dumpy wader ashy brown above; rump, upper tail-coverts and tail blackish brown, eye-stripe white; lores dusky brown, ear-coverts, cheeks and sides of neck white, streaked dusky; underparts white with streaked breast; iris dark brown, bill brown, tinged with olive-green, legs dark lead, sexes alike.

A Palaearctic breeding species, wintering from the Mediterranean and Middle East to the Indo-chinese subregion, Malaysia and Australia. It is represented by two subspecies within the Indian limits, of which the nominate subspecies *L. f. falcinellus* (Pontoppidan) occurs in the Andaman and Nicobar groups of islands during winter.

Affects sea-shore and mudflats; usually solitary; seen in association with other waders; scatters to feed, runs quickly on sand to pick up tiny insects, worms and crustaceans which comprise its food.

## Family 14. Laridae

### WHITEWINGED BLACK TERN

#### 82. *Chlidonias leucopterus* (Temminck)

Size that of the Pigeon, but considerably slimmer and with longer wings (23 cm in length).

A graceful slate-grey marsh tern with a white forehead, back of lower neck white; ear-coverts blackish, lores and whole underparts including upper tail-coverts white; iris dark brown, legs and feet orange; bill black, sexes alike.

A very extensively distributed species, breeding in southern Europe and Central Asia, wintering in Africa, India and from Malaysia to Australia. A single specimen has been recorded from the Andaman Islands.

Rare; affects swamps and coastal backwaters; lives mainly on water insects and larvae, dragonflies, grasshoppers, etc., also on tadpoles and fishes; voice and calls — a sharp *kreak, kreak*

### GULLBILLED TERN

#### 83. *Gelochelidon nilotica* (Gmelin)

About the size of the Indian Lesser Crested Tern (38 cm in length).

A common pale grey tern with underparts forehead and lores white; streaked with black on crown and nape and with a dark patch in front and behind eyes; iris dark hazel, bill, legs and feet black, sexes alike.

An extensively distributed species, breeding in Europe, northern Africa and western Asia, wintering in Africa, India and occasionally to the Sunda Islands; represented by two subspecies within the Indian limits of which *G. n. affinis* (Horsfield) has been recorded as a vagrant from the Andaman Islands. It differs from the nominate subspecies *G. n. nilotica* (Gmelin) in having a smaller wing.

Prefers coastal area, moving singly or in pairs, feeds on water insects, crabs, frogs and small fishes; voice and calls — a deep metallic *kan-wick*.

## BROWNWINGED TERN

### 84. *Sterna anaethetus* Scopoli

Slightly smaller than the Rosy Tern (37 cm in length).

A medium-sized sea tern with forehead, supercilium and entire underparts including streamers white; rest of the plumage sooty-brown, darker on head and wings, paler and greyer on mantle; iris dark brown, bill, legs and feet black; sexes alike.

Widely distributed throughout the tropical seas of the world, represented by three subspecies within the Indian limits, of which the nominate subspecies *S. a. anaethetus* Scopoli has been recorded from the Andaman Islands as a straggler

Gregarious and exclusively maritime; usually found offshore; food consists of small fishes and also crustaceans; voice and calls — a harsh *quirk*.

## INDIAN LESSER CRESTED TERN

### 85. *Sterna bengalensis* Lesson

About the size of a domestic pigeon, but with much longer wings (43 cm in length).

A large tern with lores, forehead and entire underparts white; crown white, streaked with black, nuchal crest, short and black, rest of the upperparts ashy grey with a slight pinkish tinge on the mantle; crown and forehead turn black in summer; iris brown, bill yellow to orange yellow; legs and feet black, sexes alike.

Widely distributed species, extending from the Mediterranean and the coasts of east Africa to Australia. The nominate subspecies *S. b. bengalensis* Lesson occurs commonly along the western and eastern seaboard of India including the Andaman and Nicobar Islands.

Usually seen singly in offshore waters; food consists of fish captured by plunging from the air: voice and calls — a characteristic *chirrak*.

## LARGE CRESTED TERN

### 86. *Sterna bergii* Lichtenstein

Larger than the Indian Lesser Crested Tern (53 cm in length).

A very large smoky grey tern with a slightly forked-tail, secondaries with white tips; sides of head, neck and underparts white; crest black; crown white (in winter), black (in summer); forehead white; bill greenish yellow.

The species ranges throughout the islands and coasts of the Indian Ocean, Persian Gulf, tropical Pacific, coasts of Australia and South Africa. It has been recorded from Palu Bhabi, Great Nicobar Island by H. Abdulali in 1966

## ROSY TERN

### 87 *Sterna dougallii* Montagu

About the same size as the Gullbilled Tern, but more slenderly built (38 cm in length).

A slender tern with upperparts and long pointed wings grey; underparts and rump white; tail forked and grey, streamers white; in summer forehead, crown and nape black, underparts white with rosy flush, in winter forehead and forecrown white, freckled with black; crown and nape black; underparts suffused with faint rosy tint; iris dark brown, bill black with red base (summer) and throughout black (winter); legs and feet dark red, sexes alike.

A very extensively distributed species from North Atlantic and Caribbean Sea through the Old World temperate and tropical regions to Far East and Australasia. The subspecies *S. d. karustes* (Hume) is found to breed in the islands and coasts of the tropical Indian Ocean including the Andaman Islands.

Affects sea coast and offshore islets; seen in parties, often diving for fishing in shallow water: breeds in mixed colonies with other terns from April to June among grass tufts on rocky islets; lays one or two eggs; voice and calls — a deep metallic *kan-wick*.

## SOOTY TERN

### 88. *Sterna fuscata* Linnaeus

About the same size as the Indian Lesser Crested Tern (43 cm in length).

A black and white tern with long pointed wings and deeply forked tail, upperparts dark brown to sooty-black, except for a white frontal band, head black (in winter speckled with white); breast and throat white; underparts greyish, iris brown, bill, legs and feet black; sexes alike.

Widely distributed throughout the tropical seas of the world. The subspecies *S. f. nubilosa* Sparrman occurs in the Andaman Islands as a resident.

Rare; moves in flocks; food consists of marine fishes.

## BLACKNAPED TERN

### 89. *Sterna sumatrana* Raffles

The size more or less that of the House Crow but slimmer (35 cm in length).

A maritime bird, upperparts light grey; head and neck white with a black spot in front of the eye and a black band round the nape; tail long and forked, central tail feathers grey, streamers white; underparts white, suffused with pink, iris dark brown, bill black with yellow tip; legs and feet black; sexes alike.

A widely distributed species of the islands of the Indian and West Pacific Oceans. The nominate subspecies *S. s. sumatrana* Raffles is found in the Andaman and Nicobar Islands as a resident.

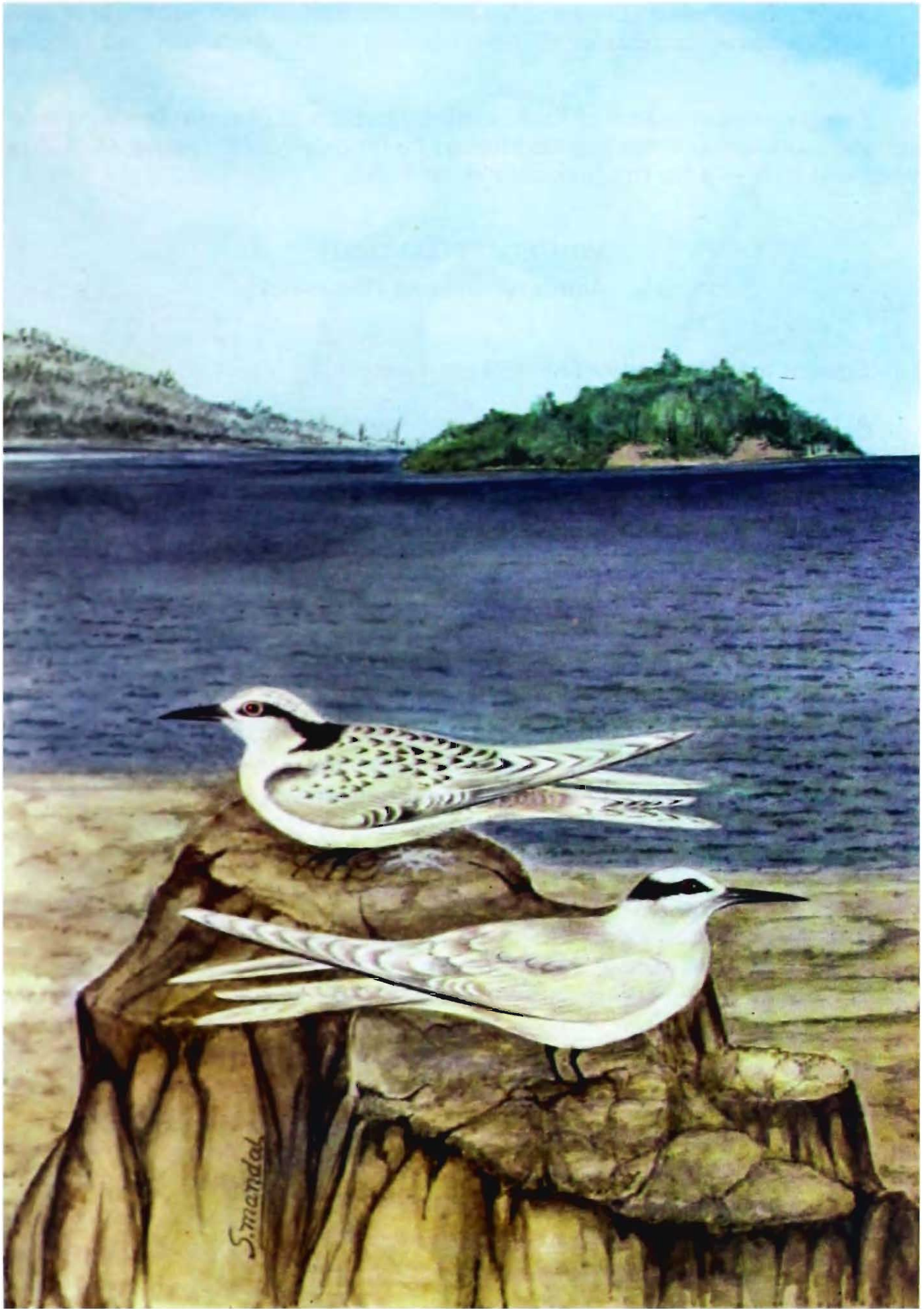
Common, favours lagoons and usually keeps close inshore; moves in flocks, congregating where food is available, which is chiefly marine fishes; breeds on rocky islands in scattered colonies among coral and rocky beds between May and July; the clutch consists of two or three eggs; after breeding disperse to a greater area.

## NODDY TERN

### 90. *Anous stolidus* (Linnaeus)

About the size of the Indian Lesser Crested Tern (41 cm in length).

A dark sooty-brown tern, with white forehead, gradually shading into the greyish brown of the nape; lores and streak over the eye black, chin and throat lead-grey; tail wedge-shaped, iris dark brown, bill black, legs and feet brownish fleshy; sexes alike.



*Sterna sumatrana sumatrana* Raffles. Adult male below and subadult male above.

Widely distributed species throughout the tropical and subtropical seas. The subspecies *A. s. pileatus* (Scopoli) occurs in the Andaman and Nicobar Islands.

Congregates in search of food, seldom hovers and plunges; feeds on small surface molluscs and floating oddments; commonly found resting on buoys; voice and calls — a harsh croak *kar-r-rk* on flight.

#### WHITECAPPED NODDY

#### 91 *Anous tenuirostris* (Temminck)

Smaller than the Noddy Tern (33 cm in length).

A blackish brown tern with white forehead and crown, lores and chin black; sides of neck, throat and foreneck black with a grey wash, feathers round the eye whitish, ear-coverts dark grey; iris brown, bill black; legs and feet brownish black, sexes alike.

Widely distributed species throughout the seas of the tropics. The subspecies *A. t. worcesteri* McGregor has been recorded as a straggler from the Andamans.

#### Order VIII Columbiformes

#### Family 15. Columbidae

#### GREYFRONTED GREEN PIGEON

#### 92. *Treron pompadora* (Gmelin)

Between the Myna and the Pigeon in size (30 cm in length).

A small pigeon with the upper parts yellowish green, mantle chestnut-maroon in male, olive green in female; wing-coverts black except for the green lesser coverts; wing-band yellow; forehead and crown grey; underparts greenish yellow; orange of the breast faint or absent in female; under tail-coverts dark green, tipped with yellow in male but buff and mottled with dark green in female; iris outer-ring pink, inner pale blue; bill grey; legs and feet red.

The species is distributed throughout India, Burma, Sri Lanka, extending eastwards to Laos and Vietnam. It is represented by five subspecies within the Indian limits of which *T. p. chloroptera* Blyth is endemic in the Bay Island. It differs from the nominate subspecies *T. p. pompadora* (Gmelin), by having head and crown grey instead of yellow.

Common, affects tall evergreen forest; keeps in small flocks up to a dozen, congregating in large numbers on fruiting trees in evergreen forests; food comprises mostly wild figs, drupes and berries; voice and calls — soft, musical whistle.



*Ducula aenea andamanica* Abdulali. Male.

## GREEN IMPERIAL PIGEON

### 93. *Ducula aenea* (Linnaeus)

Larger than a domestic pigeon (45 cm in length).

A large pigeon with the head and neck grey, tinged with pink; rest of upperparts green with coppery bronze; forehead white; central tail feathers green, remainder dull blackish brown; underparts pinkish grey; under tail-coverts chestnut maroon, sexes alike.

The species is widely distributed in South and Southeast Asia; represented by four subspecies within the Indian region, of which *D. a. andamanica* Abdulali is endemic in the Andaman and *D. a. nicobarica* (Pelzeln) in the Nicobar group of islands. The subspecies *nicobarica* differs from *andamanica* in having the grey of the head and underparts purer without pinkish tinge; upperparts blue including the tail feathers; under tail-coverts dingy brown.

Common, found singly or in loose flocks up to a dozen or more in thicker parts of forests on fruit-laden trees, generally occupying tree-tops; moves from island to island depending on the fruiting of trees; food comprises wild figs and nuts; breeds in summer nests of loose twigs are built fairly high up in canopied foliage of tall trees; the clutch consists of two eggs; voice and calls — a deep *whoom* in *andamanica* and a deeper and longer *ghoom* in *nicobarica*.

## PIED IMPERIAL PIGEON

### 94. *Ducula bicolor* (Scopoli)

About the size of the Rock Pigeon (40 cm in length).

A heavy stout pigeon, entirely ivory-white with a creamy tinge except black on wings and tail tip; iris dark brown; bill and feet blue-grey; sexes alike.

The species is widely distributed in oceanic islands from the Andamans and Nicobars to Southeast Asian islands.

Affects forests, especially mangroves; common; wandering in large flocks from island to island in search of food which comprises wild figs, nuts, etc., breeds in spring; nests made of loose sticks erected on branches of tall trees; lays a single egg; voice and calls — chuckling *hu-hu-hu*.

## ANDAMAN WOOD PIGEON

### 95. *Columba palumboides* (Hume)

About the size of a domestic pigeon but with a longer tail (40 cm in length).

Upperparts black with purplish green; head and neck pale grey in male, darker grey in female; rump slaty; lower parts from neck to vent light slaty grey,



*Ducula bicolor* (Scopoli). Male.

washed with metallic emerald and purple; iris orange; base of the bill pink merging into creamy white towards tip; legs and feet fleshy pink; claws horny white.

The species is endemic in both the groups of Islands.

Not uncommon, found in small parties or in pairs in thick forest; moving a lot from one island to another guided by the maturing of wild fruits in the forests; food comprises wild fruits, largely figs and berries; voice and calls — a deep *whoom*.

## ANDAMAN CUCKOO-DOVE

### 96. *Macropygia rufipennis* Blyth

About the size of the Pied Imperial Pigeon, but with longer pointed tail (41 cm in length).

A slender long-tailed pigeon with the upperparts dark chestnut brown, finely speckled and barred with black; crown chestnut, glossed with metallic lilac-purple; tail plain dark brown, the lateral feathers with cinnamon tips; chin and throat whitish, rest rufous-buff wavy cross-barred with black; female lacks reflections on crown, and with unbarred chestnut breast and abdomen, iris violet; bill dull horny; legs and feet dull pinkish, red in front, bright pale pink behind.

The species is represented by two subspecies occupying the two groups of islands. The nominate subspecies *M. r. rufipennis* Blyth is endemic in the Nicobar islands and *M. r. andamanica* Abdulali in Andaman Islands. The two subspecies are separable by the presence of lilac-purple gloss on the crown of the male in former and absence in the latter

Not uncommon; seen in pairs or in small flocks on fruit-laden trees; occupies dense evergreen as well as secondary forests; feeds on wild fruits and berries on trees, as well as on the ground.

## RED TURTLE DOVE

### 97 *Streptopelia tranquebarica* (Hermann)

About the size of the Myna, but of stouter built and with a longer tail (23 cm in length).

A vinous-pink dove with head and neck dark ashy grey; wing-coverts grey, quills dark brown, tail brownish grey with the outer feathers black at base, white at the end a narrow black half collar round the neck, female brownish grey, paler on the breast; iris dark brown, bill black, legs and feet red.



*Columba palumboides* (Hume) Male

The species is widely distributed in North, South and Southeast Asia, represented by two subspecies within the Indian limits, of which *S. t. humilis* (Temminck), is found in the Andaman Islands as a resident.

Not uncommon in scrub jungles and around cultivated tracts; seen in pairs or small flocks often in association with other doves; food comprises wild as well as cultivated seeds; nests on foliated trees in the mangrove belt; the clutch consists of two eggs; voice and calls — a low deep *guroo-gug-goo* repeated at intervals.

## EMERALD DOVE

### 98. *Chalcophaps indica* (Linnaeus)

Larger than the Turtle Dove (27 cm in length).

A brownish pink dove with glistening emerald bronze-green upperparts; crown and neck ashy grey with white forehead and supercilium, shoulders white; rump-band grey, freckled with white; tail grey; rest of underparts purplish vinous; under tail-coverts dark slaty grey; female similar but duller and browner lacking the grey on the head and the white on the shoulders; tail brown and grey; underparts reddish brown; iris brown; bill coral red, legs and feet pinkish red.

Widely distributed species from India, east to Malaysia, Philippines, Australia and New Caledonia. It is represented by three subspecies within the Indian limits of which *C. i. maxima* Hartert is endemic in the Andamans and *C. i. augusta* Bonaparte in the Nicobars. Compared to the subspecies *maxima*, *augusta* is slightly smaller and darker with the breast and abdomen rich vinaceous, washed with lilac grey; crown and neck deep grey; rump-band grey with the bluer vinaceous hue of the underparts; in female, underparts grey, rump-band indistinct.

Common, keeps singly or in pairs; usually seen running on the jungle tracks where it obtains all its food which consists of various seeds, grains and berries; voice and calls — deep and low *hoon* in *maxima*.

## NICOBAR PIGEON

### 99. *Caloenas nicobarica* (Linnaeus)

About the size of the Rock Pigeon (40 cm in length).

Upperparts slaty grey with metallic blue-green and copper-bronze sheen, a prominent mane comprising long metallic neck-hackles; tail and its coverts white; underparts slaty grey; legs purplish to coral red, long and stout, adapted



*Macropygia rufipennis rufipennis* Blyth. Male and female.

for terrestrial movement and forest floor scratching; iris white; bill slaty black, large and curved at the tip, fleshy at the base; female in general have duller plumage with shorter neck-hackles (mane).

The species is distributed in the Indo-Australian region. The nominate subspecies within the Indian limits is found chiefly in the Nicobar group of Islands as a resident; some stragglers have been recorded in the Andamans as far north as the Coco.

Common, met with singly or in small parties in denser parts of wet forests where human interference is the least. Generally forages on ground actively searching morsel; when flushed flies swiftly with noisy flutter to occupy well foliated higher branches; a good long distance flier crossing the sea from island to island in small and large flocks of a dozen or two; food comprises wild berries, drupes and seeds; nests of loose twigs are built on higher branches in spring and summer; the clutch consists of a single egg; voice and calls — a groaning croak.

*Note* Although reported to be common in less frequented islands of Nicobars yet its population has certainly depleted in some of its well known quarters in recent years, viz., Camorta, Teressa, Batti Malv and Car Nicobar Islands. Perhaps its status is still better in the Great Nicobar and some unexplored islands.

## Order IX. Psittaciformes

### Family 16. Psittacidae

#### REDBREASTED PARAKEET

#### 100. *Psittacula alexandri* (Linnaeus)

About the size of the Pigeon, with long pointed tail (39 cm in length).

A grass-green parakeet, with a purplish grey head, a narrow band from eye to eye across the forehead, and a wide black band from the chin to the sides of neck, wing-coverts yellowish, tail green and blue; underparts vinaceous red with the vent and under tail-coverts yellowish green; in female head slaty bluish green, breast duller than the male; iris pale yellow in male and whitish yellow in female; bill coral red above, brownish black below in male and throughout black in female; legs and feet dusky greenish yellow.

A widely distributed species of South Asia extending throughout the foot hills of the Himalayas and through northern Burma to Vietnam, and southern China represented by two subspecies within the Indian limits of which *P. a. abboti* (Oberholser) is endemic in the Andaman Islands.



*Chalcophaps indica maxima* Hartert Male and female

Quite common, inhabits wooded area and forest clearings; parties of 10-12, sometimes larger are met with, invades standing crop of corn, cereals and orchards, sometimes causing appreciable damage; nests in hollows of tall, old trees; clutch consists of three or four eggs; voice and calls — a distinctive *kewn*.

### NICOBAR PARAKEET

#### 101 *Psittacula caniceps* (Blyth)

About the size of the Pigeon, slender and with long, pointed tail (61 cm in length).

A long-tailed yellowish green parakeet with a grey head, forehead black, continued backward as a broad stripe to each eye; a wide black band from chin to the sides of the neck, tail yellow; middle feathers blue at base, violet grey at tips; in female, head grey, fringed with blue; iris orange-red, bill red above, black below in male and black both above and below in female; legs and feet plumbeous; green in both the sexes.

The species is endemic in the Nicobar group of islands.

Common in forested areas, keeping singly or in pairs, occupying tree-tops; food comprises fruits of *Pandanus*, wild berries, nuts, etc., voice and calls — a continuous screeching note.

### ALEXANDRINE PARAKEET

#### 102. *Psittacula eupatria* (Linnaeus)

About the size of the Pigeon, slender and with long, pointed tail (53 cm in length).

A large grass-green parakeet with a long blue-green tail; moustachial streak black, a dark line from bill to eye; wings with a crimson patch, a rose-pink collar round the sides and back of the neck; lower plumage dull pale green, growing brighter towards the vent; female lacks the rose collar and moustachial streak; iris pale yellow; bill deep red, legs and feet plumbeous.

A species of South Asia, distributed practically throughout the tropical forested areas of the Indian subcontinent; represented by four subspecies within the Indian limits, of which *P. e. magnirostris* (Ball) is confined to the Andaman Islands as far south as 10 degree channel. It differs from all other subspecies by having a larger and heavier bill, red shoulder-patch much brighter and central tail-feathers more blue.



*Caloenas nicobarica nicobarica* (Linnaeus). Male

Fairly common, flocking in small parties of six to twelve, congregating in large numbers on mangrove trees to roost; food comprises wild and cultivated seeds, fruits, etc., breeds during February-March preferring hollows of large forested trees; the clutch consists of two or three eggs; voice and calls — loud, harsh screeching screams.

### REDCHEEKED PARAKEET

#### 103. *Psittacula longicauda* (Boddaert)

About the size of the Myna with a long pointed tail (48 cm in length).

In male, cheek-patch reddish, crown green, a black band stretch from nostril to eyes; nape yellowish green, upper back greyish yellow green to bluish on the middle of the back, rump bright green, tail long, graduated and green, central feathers blue; mandibular stripe on each side of neck black; rest of underparts green, yellower on breast; female generally with dull red cheek patch, mandibular stripe partially tinged with green, rest of plumage, above and below uniformly green, iris bright yellow; bill red in male black in female; legs greyish green.

The species is widely distributed throughout the Andaman and Nicobar Islands and Malaysian subregion. It is represented by the subspecies *P. l. nicobarica* (Gould) in the Nicobars and *P. l. tytleri* (Hume) in the Andamans within the Indian limits. The subspecies *tytleri* differs from *nicobarica* in having the yellow tinge of the back replaced by a strong violet wash, underparts much less yellow, more tinged with bluish, female also more bluish, and with the mandibular stripe all green instead of green-tinged black.

Common in the light forests and groves, flocking to cultivated crop, causing appreciable damage; food comprises grains, wild seeds and fruits; breeds in spring, nests in holes in palm and other tall trees as padouv, and also in mangroves; the clutch consists of two or three eggs; voice and calls — a loud, shrill screaming *kee-ak* in *nicobarica*.

### INDIAN LORIKEET

#### 104. *Loriculus vernalis* (Sparrman)

About the size of the House Sparrow (14 cm in length).

A diminutive parrot with short square tail; upperparts grass green, underparts yellowish green, a blue patch on the throat in male, lacking in female; rump and upper tail-coverts rich crimson, iris yellowish to greyish white; bill small, coral red, tipped yellow; legs and feet yellowish to light orange.



*Psittacula caniceps* (Blyth) Male

A Southeast Asian species extending from India through Bay Islands and Thailand to Vietnam. The nominate subspecies is resident in the Andaman and Nicobar group of Islands.

Common in evergreen biotope; found in pairs or in small flocks, frequenting orchards, groves and gardens fleeting in search of flowers and fruits; often seen hanging upside down on branches uttering twittering note; breeds in spring and summer; natural holes in trees preferred for nesting; the clutch consists of three or four eggs; voice and calls – normally quiet.

## Order X. Cuculiformes

### Family 17 Cuculidae

#### THE CUCKOO

#### 105. *Cuculus canorus* (Linnaeus)

About the size of a domestic pigeon but more slenderly built, and with a proportionately longer tail.

Above dark ashy grey, including head, neck, breast and upperparts; primaries barred with white; tail blackish brown, tipped and spotted with white; rest of the lower plumage including edge of the wing white, barred with dark brown, female similar but browner above with a rufous tinge on breast and sides of neck, sometimes mottled chestnut and black (hepatic phase); iris, base of bill, and feet chrome yellow in both sexes.

A Palearctic breeding species, south to northern Africa, southeastern Tibet, Himalayas and northern Burma, wintering south of its breeding range from Africa to Australia. It is represented by two subspecies within the Indian limits. The nominate subspecies *C. c. canorus* Linnaeus has been recorded from the Andaman Islands as a rare vagrant.

Uncommon, chiefly arboreal, keeps solitary to leafy trees; food comprises insects and their larvae; voice and calls  $\pm$  double-noted *cuck-koo* in spring and summer

#### INDIAN CUCKOO

#### 106. *Cuculus micropterus* Gould

Same size as the Cuckoo (33 cm in length).

A brownish grey bird with the head, neck, throat and upper breast ashy, paler on chin, tail brown, graduated, tipped with white and with a sub-terminal



*Psittacula longicauda nicobarica* (Gould). Female and male.

black band, underparts buffy white with strong black transverse bars; female greyish with rufous brown breast; iris brown, bill horny brown above, greenish brown below; legs and feet yellow.

A resident of the Himalayas, seasonally spreading out throughout India except the arid areas; also in the Bay Islands where it is uncommon being restricted to forested areas during autumn and winter

Chiefly arboreal, keeping singly to tree-tops and canopy foliage; food consists of insects; voice and calls — four noted *ka-phal-pak-ko*.

### HIMALAYAN CUCKOO

#### 107 *Cuculus saturatus* Blyth

Slightly smaller than the Cuckoo (31 cm in length).

Very similar to *Cuculus canorus* Linnaeus (No. 105) in general appearance; male distinguished from it by wider and bolder black bars on underparts; edge of the wing whiter; slightly smaller in wing; iris reddish brown; bill dark horny green, legs and feet wax yellow to bright yellow.

A widely distributed species of North and Southeast Asia. Within the Indian subcontinent its breeding range extends from Northwest to Northeast Himalayas, migrating southwards to the plains. The nominate subspecies *C. s. saturatus* Blyth is found in the Andaman and Nicobar Islands in summer

Common, chiefly arboreal, keeps singly in densely foliaged trees; food consists of soft insects; voice and calls — a loud, four-noted *hud-hud-hud-hud*.

### EMERALD CUCKOO

#### 108. *Chalcites maculatus* (Gmelin)

About the size of a sparrow (18 cm in length).

A tiny emerald cuckoo, upper plumage including head and neck brilliant metallic green glossed with golden bronze; primaries long and pointed, bear a white patch at the base; chin, throat and upper breast suffused with green, tail short, graduated, barred with white and tipped white; underparts white, lightly barred with green; in female, crown and nape golden ferruginous; tail barred with chestnut and black; underparts white, washed with reddish buff and barred with bronze-brown, iris red-brown, bill orange-yellow, tipped black; legs and feet dark brownish green.

A very widely distributed species extending from Indian subcontinent through the Himalayas to Malay Peninsula and Indochinese region where it breeds; in winter migrates to south of its breeding range as far as Sri Lanka, the Andaman and Nicobar Islands and Sumatra.

Infrequently met with, affects mostly evergreen light forests; food consists of ants, caterpillars, bugs and other soft-bodied insects; voice and calls — loud, three noted whistle.

#### VIOLET CUCKOO

##### 109. *Chalcites xanthorhynchus* (Horsfield)

About the size of a sparrow (17 cm in length).

A small cuckoo with the head, neck and upperparts glossy violet; wings long and pointed, tipped white; tail short, black, tipped white; chin, throat and upper breast violet; rest of underparts banded with broad white and violet bands; female brown with bronzy green reflections above, finely barred with white, and bronzy green below; iris red, eyelids green with a red rim, bill orange yellow in male, dull yellow in female; legs and feet brownish green.

A widely distributed species, spread over Southeast Asia. The nominate subspecies *C. x. xanthorhynchus* (Horsfield) is confined to northeast India, migrating south of its breeding range to Indian peninsula and the Andaman and Nicobar Islands.

An uncommon vagrant to the islands, affecting tropical evergreen forests.

#### DRONGO-CUCKOO

##### 110. *Surniculus lugubris* (Horsfield)

About the size of the Bulbul, with a longer tail (25 cm in length).

Entire plumage black throughout, with a deep steel-green to purple blue gloss; under tail-coverts and outermost tail feathers narrowly barred with white; primaries with white spots; bill long, thin and slightly decurved.

Widely distributed species in most part of the Oriental region and Malaysian subregion. It has been recorded from the Great Nicobar Island by H. Abdulali in 1977

Uncommon, keeps singly to the foliage canopy of trees; food consists of caterpillars and beetles, and various seeds.

## KOEL

### 111 *Eudynamys scolopacea* (Linnaeus)

About the size of the House Crow but with a longer tail (43 cm in length).

Male black throughout with a green gloss; female dark brown, conspicuously spotted with rufous-buff; tail feathers and wing quills barred with white; rest of underparts rufous spotted and barred, iris crimson, bill yellowish green, stout, rounded and curved, legs and feet plumbeous.

An extensively distributed species, ranging throughout the greater part of the Oriental region to New Guinea and Australia; represented by three subspecies within the Indian limits of which *E. s. dolosa* Ripley is endemic in the Andaman and the Nicobar groups of Islands.

Common, frequenting forest trees and green foliated groves; feeds mostly on fruits; voice and calls — a loud, *kuoo-kuoo*.

## ANDAMAN CROW-PHEASANT

### 112. *Centropus andamanensis* Beavan

About the size of the Jungle Crow, but with longer and broader tail (48 cm in length).

A large, pale greyish ochre-brown bird with chestnut bay mantle and wings, and a long, graduated dark brown tail; iris crimson, bill black, large, heavy and curved, legs and feet black, strong and naked, sexes alike.

An endemic species in the Andaman Islands.

Common, met with singularly in the mangrove swamps, light forested areas and along hedgelines of cultivated fields; walks to cover a large area for foraging, food consists of all kinds of insects, small frogs and lizards; lays two or three eggs from the month of February to the end of July in the dome-shaped nest composed of twigs, grass and leaves; voice and calls — a deep *boom, boom, boom*.

## Order XI Strigiformes

### Family 18. Strigidae

## BARN OWL

### 113. *Tyto alba* (Scopoli)

About the size of the House Crow (36 cm in length).

A long-legged owl, dark brown above, mixed with rufous, finely stippled with black and white; wings and tail fawn with grey freckles, spotted with black



*Centropus andamanensis* Beavan Female

and white, and barred, facial disc rufous; rest of lower surface brownish rufous, with scattered dark brown spots; sexes alike.

A worldwide breeding species. It is represented by two subspecies within the Indian limits, of which *T. a. deroepstorffi* (Hume) is endemic in the Andaman Islands.

Rare; inhabits forested areas; roosting by day in hollows of trees and crevices of rocks and old buildings, singly or in pairs; food consists mostly of rodents, shrews, birds, lizards, etc., voice and calls — a long-drawn shrieks, snores and hisses.

## ANDAMAN SCOPS OWL

### 114. *Otus balli* (Hume)

About the size of the Myna (19 cm in length).

A small rufous brown owl, finely vermiculated on the upperparts with black, and with black-edged whitish fulvous spots; scapulars marked with black and white; tail rufous with pale buff bars; lowerparts fulvous-grey, vermiculated with dark brown and spotted with whitish brown-tipped spots; iris golden yellow; bill yellowish, darker on culmen and tip; feet fleshy grey to greenish yellow; sexes alike.

Endemic in the Andaman Islands.

Entirely nocturnal; food consists of caterpillars and other large insects; breeds from February to mid-April; nests in hollows of tall and old trees; the clutch consists of two or three eggs; voice and calls — *hoot ! hoot – coorroo !*

## SCOPS OWL

### 115. *Otus scops* (Linnaeus)

Same size as the Andaman Scops Owl (19 cm in length).

Whole upperparts finely vermiculated and faintly spotted with black and white, tinged with cinnamon-brown, ear-tufts long and prominent; facial disc mixed white and brown, lores white, tipped black; scapulars marked with white on outer edges; tail barred brown, lower plumage lighter than back, and whiter on abdomen, all stippled with brown and banded with white, interrupted by broad black shaft-streaks; in rufous phase back is unmarked, breast rufous, streaked, rest of lowerparts are as in the normal bird but with bright rufous replacing the grey; legs grey and feathered, sexes alike.



*Ninox affinis affinis* Beavan Female

The species breeds in Europe, Africa and Asia, to southern Asia and the Philippines, migrating south in winter from its breeding range. It is represented by four subspecies within the Indian limits, of which *O. s. modestus* (Walden) is endemic in the Andamans and *O. s. nicobarica* (Hume) in the Nicobars. The subspecies *nicobarica* differs from *modestus* in being larger in wing.

Entirely nocturnal, retiring during daytime into hollows in tree-trunks and thickly foliated branches, standing upright with half-shut eyes; emerges at dusk.

## ANDAMAN BROWN HAWK-OWL

### 116. *Ninox affinis* Beavan

About the size of the Pigeon (28 cm in length).

A hawk-like owl, deep brown above, forehead and lores white, quills brown with pale bands; tail barred black, tipped white; throat and foreneck fulvous, streaked with brown, rest of underparts white with large drops of rufous brown forming broken bars; under tail-coverts white, axillaries unspotted, iris yellow; bill blackish, paler and greenish on culmen and tips; feet yellowish, sexes alike.

An endemic species limited to the Andaman and Nicobar Islands. The nominate subspecies *N. a. affinis* Beavan occurs in the Andamans and *N. a. isolata* Baker in the Nicobars. The subspecies *isolata* is similar to *affinis* but a little browner and distinctly larger

Common, inhabits mangrove forests of estuaries, creeks and lagoons; keeps singly or in pairs, perched on tall trees in field and clearings, hawking insects at dusk.

## BROWN HAWK-OWL

### 117 *Ninox scutulata* (Raffles)

Slightly larger than the Andaman Brown Hawk-Owl (31 cm in length).

A medium-sized owl, dark chocolate brown above; lores and forehead white with black bristles; scapulars with white stripes; tail barred pale and blackish brown with whitish tip; throat fulvous, streaked with brown; rest of lower plumage white with long, oval, chestnut drops; legs covered with bristles; iris yellow; bill horny slate or bluish black, feet dull yellow; sexes alike.

Widely distributed species throughout most part of the Oriental region, represented by four subspecies within the Indian subcontinent, of which *N. s. obscura* Hume is endemic in the Andaman and Nicobar Islands.



*Ninox scutulata obscura* Hume Male

Common, affects forest about the settlements; keeps singly or in pairs on tree stump at dusk and fairly diurnal in habits; food consists of frogs, lizards, beetles and other insects; voice and calls — a loud disyllabic *coo-ooks*.

## INDIAN JUNGLE NIGHTJAR

### 118. *Caprimulgus indicus* Latham

About the size of the Common Myna, but with longer wings and tail (30 cm in length).

A beautiful, soft-plumaged bird, dark grey brown above, finely pencilled, mottled and streaked with black; upper wing-coverts with light tips, forming indistinct wing bar; first four primaries spotted white; central tail feather grey with black bar; outer four pairs sub-tipped white, absent in female; throat patch white; rest of underparts buffy grey, mottled and barred, rectal bristles black in both the sexes; iris brown, bill horny brown; feet pinkish brown.

Widely distributed species throughout South, East and Southeast Asia, migrating southwards in winter; represented by three subspecies within the Indian limits, the largest form *C. i. jotaka* Temminck & Schlegel was once obtained at sea off the Andaman Islands in April.

## Order XII Caprimulgiformes

### Family 19. Caprimulgidae

#### LONGTAILED NIGHTJAR

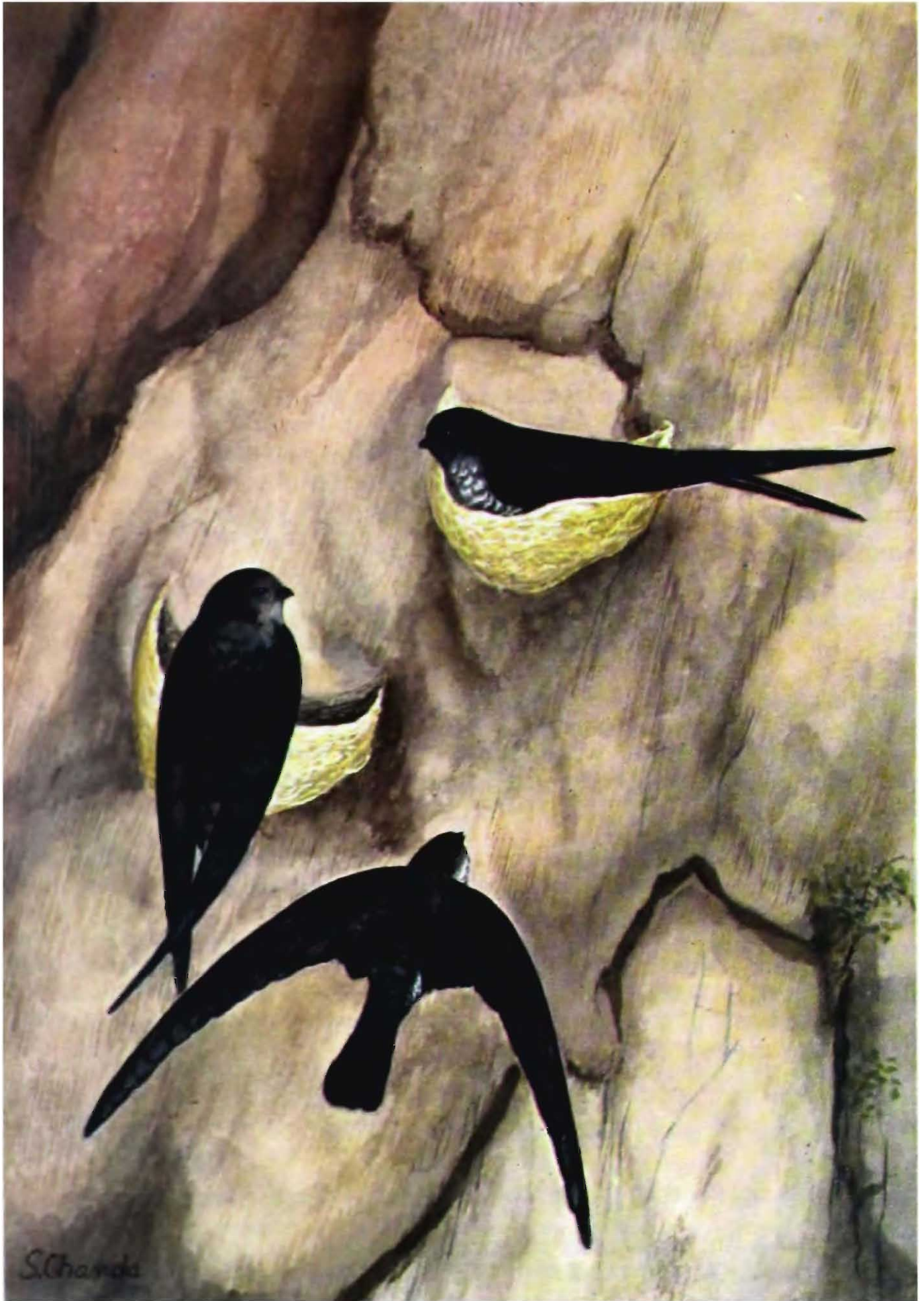
### 119. *Caprimulgus macrurus* Horsfield

Between the Common Myna and the Pigeon in size, but slender (33 cm in length).

A soft-plumaged, long-winged, nocturnal bird, upper plumage finely pencilled brown and buff, hind-collar rufous and pale; crown with scattered black stripes; scapulars with a large black spot and barred, primaries spotted with rufous on both the sexes; tail barred, with bold white tips on outer feathers; throat patch and moustachial streak white; breast mottled, rest of underparts buff; iris dark brown, bill pinkish brown, feet fleshy brown.

The species is found throughout the Indian subcontinent and extends to Malaysia and Australia, represented by four subspecies within the Indian limits, of which *C. m. andamanicus* Hume is endemic in the Middle and South Andamans.

Common, keeps singly or in pairs amongst dry leaves on the forest floor during daytime; seen hawking on insects at dusk over mangrove swamps; breeds during hot weather; normally lays two eggs on the ground in a shady forest nullah, voice and calls — a loud, resonant *chonk – chonk – chonk*.



*Collocalia esculenta affinis* Beavan Male and female

Order XIII Apodiformes

Family 20. Apodidae

HIMALAYAN SWIFTLET

120. *Collocalia brevirostris* (Horsfield)

Smaller than a sparrow (13 cm in length).

A small blackish brown swift with a slightly forked tail; wings glossed with steel blue; rump pale grey the feathers with thin blackish shaft stripes; feathers round the eye blackish, underparts greyish brown, darker on chin and throat, the whole with thin darker shaft stripes; iris brown, bill black; legs and feet brownish fleshy; sexes alike.

Widely distributed species throughout the eastern part of the Oriental region. It is represented by two subspecies within the Indian limits, of which *C. b. innominata* Hume was recorded in winter from Port Blair South Andaman Islands, as a straggler

Usually seen hawking insects in loose scattered flocks in the air; food consists of dipterous and hymenopterous insects.

WHITEBELLIED SWIFTLET

121. *Collocalia esculenta* (Linnaeus)

Smaller than the Himalayan Swiftlet (10 cm in length).

A tiny swiftlet, above glossy blue black; chin, throat and breast, brownish grey, abdomen white; tail unforked, tarsus bare; iris deep brown; bill and legs black, sexes alike.

The species is widely distributed in Oceanic islands from the Bay Islands to Southeast Asian countries. The subspecies *C. e. affinis* Beavan is endemic in the Andaman and Nicobar groups of Islands.

Common, keeps in large flocks; flies freely near human habitation while hawking flying insects; roosts and nests in small colonies in factory sheds, tool houses, etc., nest of green fibres, lichens, often placed on cliffs; lays two white eggs from December to April.

ANDAMAN GREYRUMPED SWIFTLET

122. *Collocalia fuciphaga* (Thunberg)

Slightly smaller than the Himalayan Swiftlet (12 cm in length).

A small swift, upperparts blackish brown, darkest on crown, wings and forked tail, with a faint purplish gloss on the latter two; rump paler brown, throat silvery grey; rest of underparts greyish brown, the feathers often dark-shafted, iris dark brown, bill black, legs and feet dark brown, sexes alike.

The species is widely distributed in Oceanic islands from the Bay Islands to Southeast Asian countries. The subspecies *C. f. inexpectata* Hume is endemic in the Andaman and Nicobar Islands.

Common, keeps in large flocks; prefers the sea coast and the vicinity of human habitation, spends the daylight hours in hawking in the mangrove swamp; roosts at night in fissures of cliffs and rock scraps; breeds during March–April and lays only two eggs in half-cupshaped nest made of pure saliva, looking like silvery white gelatine; nest of good edible quality.

## LARGE BROWNTHOATED SPINETAIL SWIFT

### 123. *Chaetura gigantea* (Temminck)

About the size of the Myna (23 cm in length).

A large swift, blackish brown above, glossed with green, dark brown below; back, chin and throat pale brown; a black spot in front of the eye; a white patch on either side of forehead, tail square and pointed, vent and undertail-coverts white; iris brown; bill black; legs and feet greyish pink; sexes alike.

The species extends from northeastern India east to Indochinese and southeast to Malaysian subregions, Philippines and Sulawesi (Celebes). The subspecies *C. g. indica* Hume is resident in the Andaman Islands.

Fairly common; keeps in small parties of four or five birds; spends the day on the wing, hawking flying insects over grasslands; roosts at night in colonies within the hollow boles of lofty ancient trees; food consists of flying insects, beetles and ants; voice and calls — a high-pitched nasal note *EEK, eek, eek, eek, eek*.

## THE SWIFT

### 124. *Apus apus* (Linnaeus)

Somewhat smaller than the Bulbul, with long, pointed, narrow wings (17 cm in length).

Upper plumage uniformly dark brown, forehead paler and mantle with slight gloss; tail as back and deeply forked, chin whitish; rest of underparts blackish, with a few crescentic marks on abdomen; bill black; legs and feet purplish brown; iris dark brown; sexes alike.

Widely distributed Palearctic species, occurring south to Africa, the northern forms migrating to the south in winter. The subspecies *A. a. pekinensis* (Swinhoe) occurs in the Andaman Islands as a straggler.

Gregarious; entirely insectivorous and rapid flyer. voice and calls — a long drawn harsh screaming *sweeer* or *sweereee*.

Order XIV Coraciiformes

Family 21 Alcedinidae

COMMON KINGFISHER

125. *Alcedo atthis* (Linnaeus)

Slightly larger than a sparrow (18 cm in length).

A greenish blue bird with a disproportionately larger black bill; chestnut below; forehead to hind neck barred black and dark blue; tail dark blue; wings dull dark blue, with a pale blue spots on coverts; ear-coverts ferruginous; chin and throat whitish; legs coral red; iris hazel-brown; sexes alike.

A species of Palaearctic, Oriental and Australasian regions; represented by three subspecies within the Indian subcontinent, of which *A. a. bengalensis* Gmelin, is found in the Andaman and Nicobar Islands.

Common; met with singly in coastal mangrove patches along creeks; food comprises small fishes, tadpoles and aquatic insects; breeds during March—June; nest a horizontal tunnel in bank; clutch consists of five to seven eggs; voice and calls — a shrill musical *te-tee, te-tee*.

BLUE-EARED KINGFISHER

126. *Alcedo meninting* Horsfield

Slightly smaller than the Common Kingfisher (15 cm in length).

A tiny blue Kingfisher with a disproportionately larger black bill; orange-rufous below; forehead to hindneck barred with greenish blue, and spotted with deep blue on wings; tail short and stumpy; ear-coverts blue; lores rufous; a white patch on the sides of the neck; chin and throat pale rufous; iris brown; legs and feet coral red, sexes alike.

Widely distributed species throughout the greater part of the Oriental region, represented by two subspecies within the Indian limits, of which *A. m. rufigaster* Walden is endemic in the South and Middle Andaman Islands.

Keeps solitary; affects small forest streams; feeds mainly on fishes; breeds principally in June and July; bank of forest stream is the nesting area, making tunnel in sand bank in which lays three to five eggs; voice and calls — similar to *Alcedo atthis* (No. 125) but sharper



*Ceyx erithacus macrocarus* Oberholser. Male and female.

## THREETOED KINGFISHER

127 *Ceyx erithacus* (Linnaeus)

Smaller than the Common Kingfisher (13 cm in length).

Whole head, neck, rump and upper tail-coverts orange-ferruginous, washed with lilac; back black tinged and streaked with bright blue; wings dark brown, coverts tinged with deep blue; a dark violet-blue patch behind the ears; chin and throat whitish, lores, ear-coverts and rest of lower parts orange-yellow; iris crimson, bill and legs vermilion, sexes alike.

A species of the Oriental region, represented by three subspecies within the Indian limits, of which *C. e. macrocarus* Oberholser is endemic in the Andaman and Nicobar group of Islands, but more common in the Nicobars than in the Andamans.

Common, keeps singly, perched on some shaded rock for preying on small fishes, aquatic insects and crustaceans; voice and calls — a shrill, squeaky *chichee* while darting off

## STORKBILLED KINGFISHER

128. *Pelargopsis capensis* (Linnaeus)

Slightly smaller than the Pigeon (38 cm in length).

A large kingfisher with a massive red bill; head to nape and entire underparts including underwing coverts and a collar round the hind neck rich ochraceous; chin and throat whitish, upper back, scapulars and wing coverts deep blue, tinged with green, lower back, rump and upper tail-coverts brilliant pale blue; iris hazel-brown, legs and feet vermilion, sexes alike.

The species extends from the well-wooded and watered areas of India to Sula Islands. It is represented by three subspecies within the Indian limits, of which *P. c. intermedia* Hume is endemic in the Nicobars and *P. c. osmastoni* (Baker) in the Andaman Islands. The subspecies *osmastoni* is similar to *intermedia* but ochraceous colour of the crown much paler almost whity brown, contrasting with yellowish nuchal collar; blue-green parts greener; larger with a tremendous bill.

Common, affects the coastal mangrove patches, met with singly; food comprises smaller aquatic organisms such as shrimps, crabs, fishes, worms, etc., voice and calls — a loud *kha-u kha-u kha-u*.



*Halcyon chloris davisoni* Sharpe. Male

## WHITECOLLARED KINGFISHER

### 129. *Halcyon chloris* (Boddaert)

Between the Myna and the Pigeon in size (24 cm in length).

A maritime kingfisher: crown and upperparts greenish blue; wings and tail dark blue, brighter on rump; short supercilium and a patch under the eye white; ear-coverts dark greenish blue and mixed with black, nuchal band narrow and black, hind collar white bordered below with brownish green underparts buff; iris deep brown, bill black, whitish at the base of the lower mandible and curved upwards, legs and feet slaty black, sexes alike.

Widely distributed species from the Red Sea to Australasia and western Polynesia. It is represented by four subspecies within the Indian limits, of which *H. c. davisoni* Sharpe is endemic in the Andaman group of Islands, and *H. c. occipitalis* (Blyth) in the Nicobar group of Islands. The subspecies *occipitalis* differs from *davisoni* in being much more fulvous on the abdomen and vent; fulvous patch above the eye extended back as a broad supercilium to nape, meeting above the black collar; crown green as against greenish blue.

Common, met with singly in coastal mangrove patches along creeks; food comprises insects, lizards, frogs and fishes; breeds during summer; nests in horizontal tunnels in earth banks of creeks, occasionally in a termite mound or in the upturned roots of a fallen tree; clutch consists of three or four eggs.

## RUDDY KINGFISHER

### 130 *Halcyon coromanda* (Latham)

Slightly larger than the Whitecollared Kingfisher (26 cm in length).

Upperparts including wings and tail dark rufous with a lilac wash, underparts rufous, paler on chin and throat; rump white, tinged with blue; iris dark brown; bill and legs coral-red, sexes alike.

A species of the Oriental region, represented by two subspecies within the Indian limits, of which *H. c. mizorhina* (Oberholser) is endemic in the Andaman Islands.

Common, affects dense mangrove swamps; keeps singly or in pairs; food comprises fishes, crabs, beetles, grasshoppers, and other insects.

## BLACKCAPPED KINGFISHER

### 131 *Halcyon pileata* (Boddaert)

A trifle larger than the Whitecollared Kingfisher (30 cm in length).

A brilliantly coloured Kingfisher purple blue above, with a conspicuous black head, a broad white collar, tinged rufous; wings and coverts black; a broad white wing patch on primaries; chin, throat, sides of neck, and breast white; rest of the lower plumage rusty buff; iris dark brown; bill and legs coral-red, sexes alike.

A species of the Oriental region, commonly found in the Andaman and Nicobar Islands.

Affects the seashore and mangrove swamps; keeps singly; food comprises fishes, frogs and crabs, but also insects; voice and calls — similar to *H. smyrnensis* (Linnaeus) (No. 132) but shriller

## WHITEBREASTED KINGFISHER

### 132. *Halcyon smyrnensis* (Linnaeus)

Slightly larger than the Ruddy Kingfisher (28 cm in length).

A typical kingfisher with a red bill, bright green blue above, lighter on the rump; head, neck and lower plumage deep chocolate-brown; chin to central breast white; wing patch deep black; iris brown; bill and legs coral-red, sexes alike.

A widely distributed species extending from Asia Minor through Iran to the Oriental region. It is represented by four subspecies within the Indian limits, of which *H. s. saturator* Hume is endemic in the Andaman Islands. It differs from the other subspecies in being much darker chocolate brown on head, neck and below.

Generally met with singly; quite common in mangrove patches along creeks and coasts; food comprises insects, lizards, frogs and at times fishes; breeds during April–May; nests in tunnels in earth banks of creeks; clutch of three or four eggs; both sexes take part in incubation and upbringing of chicks; voice and calls — a loud screaming laugh in flight.

Family 22. Meropidae  
CHESTNUTHEADED BEE-EATER  
133. *Merops leschenaulti* Vieillot

About the size of the Bulbul but longer and slimmer (21 cm in length).

A slim grass-green bird with chestnut head and upper back, chin and throat pale yellow, bordered by a chestnut and black gorget; below pale greenish, tail square; downcurved, pointed black bill, iris crimson, legs and feet blackish brown, sexes alike.

The species ranges from India through the Indochinese subregion to Malaya, Java and Bali; represented by two subspecies within the Indian limits, of which *M. l. andamanensis* Marien is endemic in the Andaman Islands.

Common, frequents the neighbourhood of streams and roads running through the forests; keeps in flocks of 8-30, perching on bare branches near the top of forest trees; assembles in large flocks for roosting in some favourite site; makes constant sallies after winged insects; lays four or five eggs in a hole excavated in sand bank or earth cliff during March – April, voice and calls — a musical trill *tree-tre-tre*.

BLUETAILED BEE-EATER  
134. *Merops philippinus* Linnaeus

Size that of the Chestnutheaded Bee-eater but with a long pointed tail (31 cm in length).

A graceful green bird with a rufescent bronze tinge; rump, upper tail-coverts, and tail azure-blue; lores to ear-coverts black; chin yellowish, throat and breast chestnut; rest of underparts green, iris reddish brown, bill horny black, legs dark brown, sexes alike.

Widely distributed species throughout the greater part of the Oriental region. The nominate subspecies *M. p. philippinus* Linnaeus is found in the Andaman and Nicobar groups of Islands during winter

Keeps in pairs near water; perches on leafless twigs at the top of the tree, from these vantage points it makes sallies after flying insects; voice and calls — a deep metallic *trew-trew*.



*Eurystomus orientalis gigas* Stresemann. Male.

Family 23. Coraciidae

BROADBILLED ROLLER

135. *Eurystomus orientalis* (Linnaeus)

About the size of the Pigeon (31 cm in length).

A squat sluggish roller with a large blackish head, dusky blackish brown and blue black above; wings long and pointed, deep blue with a pale blue patch, tail square, velvety blue black; throat bright blue; breast and abdomen deep blue; iris brown, bill, legs and feet orange vermilion with black on tip of bill; sexes alike.

The species extends from eastern India and North-east Asia to Australasia, northern forms wintering in the southern part of the range. It is represented by four subspecies within the Indian limits, of which *E. o. gigas* Stresemann is endemic in the Andaman Islands.

Not uncommon in well-wooded higher elevations, generally following water courses; often met with singly on the edges of forest clearings; feeds largely on insects; nests in natural hollows high up on trees; voice and calls — a harsh croak, repeated at long intervals.

Family 24. Upupidae

HOOPOE

136. *Upupa epops* Linnaeus

Size that of a myna (31 cm in length).

A buffy pink coloured bird with the upperparts striped black and white; fan-shaped crest, tipped black, long slender slightly curved brownish bill, iris dark brown, legs short, slaty brown, sexes alike.

A species of the Palearctic, Ethiopian, and Oriental regions. It is represented by four subspecies within the Indian limits, of which *U. e. saturata* Lonnberg has been recorded once from the South Andaman Island in winter

Affects open cultivated field; keeps singly or in scattered pairs; feeds entirely on ground insects and their grubs and pupae; voice and calls — a triple *hud-hud-hud*.



*Rhyticeros narcondami* Hume Male and female incubating in the nest.

Family 25. Bucerotidae  
NARCONDAM HORNBILL  
137 *Rhyticeros narcondami* Hume

About the size of the Pariah Kite (66 cm in length).

A large black hornbill with elongated cream-yellow bill, bearing a light brown casque, pink at base; tail white; male differs from female in being slightly larger crown and neck rufous; iris orange-red in male, dark olive-brown in female; legs and feet black.

Endemic species in the Narcondam Island.

Common, roosts on taller trees from forest fringes on the coast to the highest peak of the island, often undertaking leisurely flying excercises in small parties from one part of the island to the other; food comprises wild figs; nests in natural tree-hollows, pretty high up in tall trees; voice and calls — loud *ka-ka-ka-ka* with tone quality of domestic fowl's cackle.

*Note* The species is confined to an area of about five square kilometres. Since the area has remained undisturbed, there is no fear of its extermination.

Order XV Piciformes  
Family 26. Picidae  
GREAT BLACK WOODPECKER  
138. *Dryocopus javensis* (Horsfield)

About the size of the Jungle Crow (48 cm in length).

A magnificent large black woodpecker with crimson patches on the cheeks, forehead, crown and nuchal crest, in male; in female crimson confined to the nape only; tail wedge-shaped with stiff pointed feathers; iris yellowish white; bill straight, chisel-like, horny slate, paler on sides of lower mandible; legs and feet greyish slate.

Widely distributed species in the greater part of Oriental region, represented by two subspecies within the Indian limits, of which *D. j. hodgei* (Blyth) is endemic in the Andamans.

Common; lives in pairs or in loose family parties, chiefly in the boles of large trees, hunts for food on the higher branches of large trees; food consists of grubs of wood-boaring beetles and termites; lays two eggs in hollow of rotten tree-trunks in January and February; call — a loud chattering *kuk-kuk-kuk*, ending with a whistling *kui*.



*Dryocopus javensis hodgeri* (Blyth) Female above and male below.

## SPOTTEDBREASTED PIED WOODPECKER

### 139. *Picoides macei* (Vieillot)

About the size of the Bulbul (19 cm in length).

A little four toed woodpecker with barred black and white upperparts; crown and crest bright crimson in male, deep brown in female; central tail feathers barred with white; lores and ear-coverts buffy white; chin and throat white; rest of underparts fulvous brown, spotted with black on breast; under tail-coverts crimson, iris brown, upper mandible blackish, lower mandible plumbeous, darker at tip; legs and feet greenish slaty.

Widespread species in the Oriental region. It is represented by two subspecies within the Indian limits, of which the subspecies *P. m. andamanensis* (Blyth) is endemic in the Andaman Islands.

Common, keeps singly or in pairs in selected patches of tall trees; feeds on ants near the ground and on shrubs in the undergrowth, lays three to five eggs in a hole bored in trunks of a dead tree during January-March.

## Order XVI Passeriformes

### Family 27 Pittidae

## GREENBREASTED PITTA

### 140. *Pitta sordida* (P.L.S. Muller)

Slightly larger than the Magpie-Robin, but with a very short tail (19 cm in length).

A stub-tailed thrush-like bird, head, neck and throat black; crown rufous-brown, broadly striped with black; rest of plumage bluish green; wing quills black, patched with white; rump blue; tail black, tipped with blue; abdomen black, lower abdomen and under tail-coverts bright crimson, iris black; bill blackish, legs and feet brownish fleshy; sexes alike.

The species is distributed from Nepal through Assam and Burma to Malaysian subregion and the Philippines. It is represented by two subspecies within the Indian limits, of which *P. s. abbotti* Richmond is endemic in the Nicobar group of Islands.

Common, addicted to heavy forest, often found in open countries; lives on the ground and perches only at night or when singing, feeds chiefly on insects but also worms and snails; voice and calls -- a loud musical whistle.



*Picoides macei andamanensis* (Blyth) Male and female.

Family 28. Hirundinidae  
REDRUMPED SWALLOW  
141 *Hirundo daurica* Linnaeus

About the size of the Sparrow, but much more graceful in built and with large wing and forked tail (20-23 cm in length).

A steel-blue swallow with a deeply forked tail; supercilium and sides of head chestnut, connected by a chestnut half-collar on hindneck; rump chestnut, streaked with dark brown; throat whitish; breast and abdomen pale buff, streaked throughout with blackish shaft lines; iris brown; bill, legs and feet brownish black, sexes alike.

Widely distributed species throughout the southern and eastern parts of the Palaearctic region, India, Sri Lanka and the greater part of the Ethiopian region. It is represented by four subspecies within the Indian limits, of which *H. d. japonica* Temminck & Schlegel possibly arrives in the Andaman Islands in winter

Uncommon, frequently seen hawking winged insects over grassy hill-tops and forest clearings; voice and calls — a soft twittering warble.

SWALLOW  
142. *Hirundo rustica* Linnaeus

Smaller than the Redrumped Swallow (18 cm in length).

A steel-blue swallow with a deeply forked tail; forehead and throat chestnut; rest of underparts white, washed with pale rufous, and a black collar across the lower throat occasionally interrupted, iris dark brown, bill, legs and feet black; sexes alike.

A Holarctic species, wintering in equatorial and semitropical countries; represented by three subspecies within the Indian limits, of which *H. r. gutturalis* Scopoli occurs in the Bay Islands in winter

Common; gregarious; affects open and cultivated country and human settlements; obtains all its food by hawking to and fro; voice and calls — a loud, high pitched *tswée* when excited.



*Pitta sordida abbotti* Richmond. Male and female.

## HOUSE SWALLOW

### 143. *Hirundo tahitica* Gmelin

Somewhat smaller than the Swallow (30 cm in length).

A blue-black swallow; forehead and throat rufous chestnut; breast and abdomen pale grey, washed with brownish, a subterminal white bar or small spot on all but the central tail feathers; iris dark brown, bill black; legs and feet brownish black, sexes alike.

A Malaysian species, extending to southern India, Philippines and Australasian Islands to Tahiti; represented by two subspecies within the Indian limits, of which *H. t. javanica* Sparrman is found in the Andaman Islands as a resident.

Common; foraging near coasts and rivers but most often near human habitations; food consists of gnats and other dipterous insects captured in the air; breeds during monsoon and lays two or three eggs in a shallow half saucer of mud-nest, usually built on the edge of a sea cliff

## Family 29. Laniidae

### BROWN SHRIKE

### 144. *Lanius cristatus* Linnaeus

About the size of the Bulbul (19 cm in length).

A reddish brown shrike with a white forehead and supercilium, wings, short, brownish black, edged rufous; tail long, red-brown, a black band across the sides of the head passing over the eyes; throat white; underparts buffy rufous; iris brown, bill horny brown, thick hooked with a strong tooth at the tip and deeply notched on each side; legs and feet bluish grey; sexes alike.

The species breeds in eastern Siberia, Mongolia, Manchuria and parts of China, migrating south in winter; represented by three subspecies within the Indian limits, of which *L. c. cristatus* Linnaeus and *L. c. lucionensis* Linnaeus occur in the Bay Islands in winter. The subspecies, *lucionensis* differs from *cristatus* in having the crown grey, shading into the red of the back.

Found in open country, where it perches on bushes, tall weeds, rocks, fences and wires; very noisy and quarrelsome; food comprises locusts, grasshoppers, crickets and other insects.



*Oriolus chinensis andamanensis* Tytler. Male above and female below.

Family 30. Oriolidae

BLACKNAPED ORIOLE

145. *Oriolus chinensis* Linnaeus

About the size of the Myna (23 cm in length).

A brilliant deep yellow bird with a bold black horseshoe mark encircling the head on top; tail feathers black with broad yellow tips; wing mixed yellow and black, female duller and greener; iris crimson, bill flesh-pink; legs and feet plumbeous.

The species breeds in eastern Asia, and winters in southern and south-eastern Asia. It is represented by four subspecies within the Indian limits, of which *O. c. andamanensis* Tytler is endemic in the Andamans and *O. c. macrourus* Blyth in the Nicobar Islands. The subspecies *macrourus* differs from *andamanensis* in being paler in colour and larger in wing.

Common; foraging in the forested as well as in open country; keeps singly or in pairs; food comprises fruits, berries and insects; breeds from April to June in Andamans and lays three or four eggs in a hammock like nest cavity, built in tall trees; voice and calls — melodious, liquid notes *pee-lo'* in *andamanensis* and a long-drawn modulated whistle sounding like *pee-u'* in *macrourus*.

BLACKHEADED ORIOLE

146. *Oriolus xanthornus* (Linnaeus)

Larger than the Blacknaped Oriole (25 cm in length).

Whole head, chin to upper breast, most of the wings and a patch on the tail black, rest of plumage mango yellow; female lacks the black head, upper plumage suffused with olive; iris crimson, bill fleshy pink; legs and feet deep plumbeous.

Widely distributed species throughout the greater part of the Oriental region, represented by three subspecies within the Indian subcontinent, of which *O. x. reubeni* Abdulali is endemic in the Andamans.

Not uncommon, frequents in open country rather than deep forests; keeps singly or in pairs; chiefly frugivorous but also takes insects.



*Dicrurus andamanensis andamanensis* Tytler. Female.

Family 31 Dicruridae

ANDAMAN DRONGO

147 *Dicrurus andamanensis* Tytler

About the size of the Myna, but with a longer deeply forked-tail (35 cm in length).

A glossy black bird with blue-green metallic sheen above, dull velvety black below; tail long and deeply forked, the outer feathers curving markedly upward, tuft of hair-like backward-curving filaments on forehead, iris deep brown or blackish, bill, legs and feet black, sexes alike.

Endemic in the Andaman group of Islands. The smaller form *D. a. andamanensis* Tytler is found in southern Andaman group of Islands including the Little Andaman Island, and the larger form *D. a. dicruriformis* (Hume) in the northern Andaman group of Islands including Great Coco Island.

Common, gregarious; affects forested areas; food consists of winged insects hawking in the air; breeds during April-May and lays two or three eggs in a shallow cup shaped twig-nest; voice and calls — a long *tseep*.

GREY DRONGO

148. *Dicrurus leucophaeus* Vieillot

About the size of the Bulbul but with a longer tail (30 cm in length).

A slim, pale grey bird with long wings and a long, deeply forked tail; forehead black, lores, ear-coverts and area round the eye white; throat grey; rest of underparts blue-grey; iris red to deep crimson, bill, legs and feet black; sexes alike.

Widely distributed species throughout the greater part of the Oriental region, represented by four subspecies within the Indian limits, of which *D. l. leucogenis* (Walden) occurs in Narcondam Island and *D. l. salangensis* Reichenow in the Andaman Islands as straggler. The subspecies *salangensis* differs from *leucogenis* in being pale French grey above, underparts duller with the centre of abdomen whitish.

Uncommon, affects edges of forest clearings.

GREATER RACKET TAILED DRONGO

149. *Dicrurus paradiseus* (Linnaeus)

About the same size as the Andaman Drongo (35 cm in length).

A glistening metallic black drongo, outer pair of tail feathers greatly elongated into wires which end into two rackets; iris brown, bill and legs black, sexes alike.



*Artamus leucorhynchus humei* Stresemann. Male.

Widely distributed species throughout the greater part of the Oriental region. It is represented by five subspecies within the Indian subcontinent, of which *D. p. otiosus* (Richmond) is endemic in the Andaman group of Islands, while *D. p. nicobariensis* (Baker) in the Nicobar group. The subspecies *nicobariensis* differs from *otiosus* in being smaller in wing and having short frontal crest.

Common, keeps singly or in pairs in old forests, secondary growths and cultivated areas where tall trees are available; food consists of a variety of insects; breeds during May in the Andamans and lays three eggs in twig-nest placed in a horizontal fork of tree at a fair height; voice and calls — a loud metallic and rich melodious whistling notes.

### Family 32. Artamidae

#### SWALLOW-SHRIKE

#### 150. *Artamus leucorhynchus* (Linnaeus)

About the size of the Bulbul, but with shorter tail and much larger wings (18 cm in length).

A dumpy short tailed bird, head and neck slaty grey; back purplish grey-brown, lower rump and upper tail-coverts white; tail and wings black; throat and upper breast slaty grey and rest of underparts white; iris brown; bill bluish, legs and feet slaty to black, sexes alike.

The species is widely distributed in Oceanic islands, from the Bay Islands to Australia and the Fiji Islands. The subspecies *A. l. humei* Stresemann is endemic in the Andaman group of Islands.

Common, affects forest clearings; sociable in habit, found close together while perching, food comprises winged insects; breeds during April – May; nest a shallow, loosely built cup of fibres and weed stems, placed either in palms or in a fork or in the cavity of a broken branch, the clutch consists of two or three eggs; voice and calls — a sharp *chek-chek-chek*.

### Family 33. Sturnidae

#### GLOSSY STARE

#### 151 *Aplonis panayensis* (Scopoli)

About the size of the Myna (22 cm in length).

A small black myna, brilliantly glossed with bluish green all over except on lores; upperparts of young blackish with a slight gloss, white below, boldly streaked with black, bill and legs black, iris red-brown, sexes alike.



*Aplonis panayensis tytleri* (Hume). Adult male and young

The species is distributed in most part of the Oriental region and is represented by three subspecies within the Indian limits, of which *A. p. tytleri* (Hume) is endemic in the Andamans and Car Nicobar and *A. p. albiris* Abdulali in rest of the Nicobar group of Islands. The subspecies *albiris* differs from *tytleri* in being larger in wing and having white iris.

Common; chiefly arboreal, affects coconut groves, forest edges and clearings; keeps in flocks; food consists of various type of insects and fruits; breeds during March – May and lays three or four eggs in the natural hollow of trees; voice and calls — a sharp metallic note.

#### WHITEHEADED MYNA

##### 152. *Sturnus erythropygius* (Blyth)

About the size of the Glossy Stare (21 cm in length).

A sociable myna with long plumes on the crown; head, neck and underparts creamy white; back and scapulars pale grey; wings and tail black, glossed with green, rump, upper tail-coverts, vent and under tail-coverts deep chestnut; iris opalescent white to very pale blue; bill yellow, with blue base; legs and feet orange yellow; sexes alike.

The species is endemic in the Andaman and Nicobar groups of Islands. The nominate subspecies *S. e. erythropygius* (Blyth) is confined in the Car Nicobar Island, *S. e. andamanensis* (Tytler) in the Andaman group of Islands and *S. e. katchalensis* (Richmond) in the Katchal Island. The nominate subspecies differs from other two in having chestnut rump as against pale grey rump, whereas in *andamanensis* under tail-coverts are pale rufous, and in *katchalensis* these are chestnut.

Common, lives in forests as well as forest clearings; keeps in large flocks; feeds on nectar, fruits and insects; breeds during March – May; nests in natural tree holes; the clutch consists of four eggs.

#### ROSY PASTOR

##### 153. *Sturnus roseus* (Linnaeus)

Slightly larger than the Whiteheaded Myna (23 cm in length).

A delicate rose-pink myna with the head, neck, upper breast, wings, tail and long crest silky black, but in winter plumage duller and browner and the black feathers of the head and crest tipped with buff; iris brown, bill horny brown, yellow at gape and basal half of lower mandible; legs and feet horny brown, sexes alike.



*Gracula religiosa andamanensis* (Beavan). Male.

A Palaearctic species, wintering in Pakistan, India and Sri Lanka and an irregular visitor to the Andamans.

Gregarious; affects open cultivations and grasslands; feeds on ripening corn in open fields, nectar from flowers and ground insects; voice and calls — chattering and warbling notes.

#### DAURIAN MYNA

#### 154. *Sturnus sturninus* (Pallas)

Smaller and slimmer than the Whiteheaded Myna (19 cm in length).

A small myna with a short blackish slightly forked tail; head, neck and underparts pale grey, with a metallic patch on the nape; back, rump and wing-coverts metallic blackish purple; tail purplish black; a white ring round the eye; vent and long under tail-coverts pale cinnamon; female resembles male, but dull brown replaces glossy black on upperparts, wings and tail; nape patch dark brown; underparts mottled with white; iris brown; bill dusky, lower mandible whitish to greenish blue; legs and feet greenish horn.

The species breeds in eastern Siberia and northern China, and winters in the eastern part of the Oriental region and in the Bay Islands. It occurs as an occasional winter visitor

Keeps in flocks to open cultivated country; feeds on ripening corn in open fields, nectar from flowers and ground insects; voice and calls — an incessant chattering note.

#### HILL MYNA

#### 155. *Gracula religiosa* Linnaeus

Larger than the Myna (29 cm in length).

A jet black myna with bright orange-yellow fleshy wattles on the sides of head and nape, and a bare patch of skin below the eye; a white bar across wing, iris brown, bill and feet orange-yellow; sexes alike.

The species is distributed throughout most part of the Oriental region, and is represented by three subspecies within the Indian limits, of the which *G. r. andamanensis* (Beavan) is endemic in the Andaman and Nicobar Islands.

Common, gregarious and noisy entirely arboreal, living in closed forests and also clearings with standing tall trees; feeds mainly on fruits but also takes small animals like lizards; voice and calls — melodious whistle mixed with harsh notes.



*Dendrocitta bayleyi* Tytler Male

## Family 34. Corvidae

### ANDAMAN TREE PIE

#### 156. *Dendrocitta bayleyi* Tytler

About the size of the Myna, with a long tail (22 cm in length).

Whole head, neck, upper back and upper breast dark bluish ashy; lower back and rump pale rufous-olive; upper tail-coverts bluish ashy; tail and wing black, the latter marked with white; lower breast rufescent ashy; rest of underparts chestnut; iris bright yellow; bill, legs and feet black; sexes alike.

Endemic in the Andaman group of Islands.

Common, affects tall trees; keeps in family parties or in pairs; food consists of fruits, small mammals and reptiles; breeds in May and lays eggs in a flimsy cup-shaped twig-nest in a thickly foliated canopy; voice and calls — a harsh metallic note.

### JUNGLE CROW

#### 157 *Corvus macrorhynchos* Wagler

Larger than the House Crow, and with a much heavier beak (48 cm in length).

Whole plumage glossy black with purple sheen; iris brown; bill black; sexes alike.

Widely distributed species throughout most part of the Oriental region; represented by four subspecies within the Indian limits, of which *C. m. levaillanti* Lesson is resident in the Andaman Islands.

Common; affects outskirts of forest villages and hamlets; usually moves in pairs but may be found in flocks; food comprises fruits, insects but also young birds and birds' eggs; clutch of four eggs laid in a neat central cup of twigs without lining; voice and calls — a harsh *caw*.

## Family 35. Campephagidae

### PIED CUCKOO-SHRIKE

#### 158. *Coracina nigra* (Kloss)

About the size of the Bulbul (18 cm in length)

Upperparts including the wings and tail black with a bluish gloss; wing-coverts edged with white; tail quills tipped with white; rump light grey; a broad

stripe over the eye and the underparts white, washed with grey on the breast; female without black in plumage; brownish grey above; underparts washed with buff, narrowly barred with black, iris brown; bill, legs and feet black.

The species is distributed throughout the Oceanic islands of India, Malay Peninsula, Indonesia and Philippines. The subspecies *C. n. davisoni* (Kloss) is endemic in the Bay Islands.

Rare; affects forest edges and secondary growth and found in pairs or small parties in coastal vegetations; feeds close to the ground insects; breeds during May and lays two eggs in a cup-shaped stick nest, usually placed in a fork of a tree and well concealed by an outside layer of lichens and cobwebs.

### LARGE CUCKOO-SHRIKE

#### 159. *Coracina novaehollandiae* (Gmelin)

Slightly smaller and slimmer than the Pigeon (28 cm in length).

A dark grey bird with a massive black bill; a broad blackish band from bill through eyes to ear-coverts; wings and tail black; below paler: abdomen and under tail-coverts white and latter barred with black; female with dark eye-patch less prominent; chin, throat and breast grey; lower breast and belly finely barred with dull blackish and white; iris reddish, bill, legs and feet slaty brown.

A species of the Oriental region extending from India to southern China and to Australia through Malaysia, represented by four subspecies within the Indian limits, of which *C. n. andamana* (Neumann) is endemic in the Andaman Islands. It is larger in wing than the peninsular *C. n. macei* (Lesson).

Common, affects scrub and light forests; keeps in pairs or in loose parties, feeds on caterpillars, insects and fruits; breeds during May and June; the clutch consists of two eggs; voice and calls — a loud bisyllabic whistle *teen-ah*.

### BARRED CUCKOO-SHRIKE

#### 160. *Coracina striata* (Boddaert)

Smaller than the Large Cuckoo-Shrike (26 cm in length).

A dark grey bird with a strong black bill; a broad blackish band from bill through eyes to ear-coverts; wings and tail black; the outer feathers of the latter faintly tipped white; chin and throat pale grey, passing to greyish white on the under surface, narrowly barred with blackish brown, female similar to male but the underparts below the breast, lower back, rump and upper tail-coverts barred with black and white; iris crimson; legs and feet black.

The species is widely distributed in Oceanic islands from the Bay Islands to Southeast Asian countries. The subspecies *C. s. dobsoni* (Ball) is endemic in the Andaman Islands.

Common, keeps in pairs; usually frequents tops of trees, confined to forests, never venturing into the open fields; food consists of insects and fruits.

#### SMALL MINIVET

##### 161 *Pericrocotus cinnamomeus* (Linnaeus)

Slightly smaller and slimmer than the Sparrow, with a longish tail (15 cm in length).

A beautiful dark grey bird with a black face and blackish grey throat; rump orange-red, wings black with a yellow-orange patch, tail long, black above and yellow-orange below; breast orange-red becoming yellow on belly; the upperparts of the female as in male but paler; underparts whitish grey, suffused with yellow; iris dark brown; bill black, legs and feet horny brown.

The species is widely distributed throughout southern and southeastern parts of the Oriental region; represented by five subspecies within the Indian limits, of which *P. c. vividus* Baker occurs in the Andaman Islands as a resident.

Frequently met with in mangrove swamps; keeps in small flocks of eight to ten; food comprises moths, caterpillars and other insects; breeds during monsoon, usually lays three or four eggs in the cup-shaped nest cavity, placed on trees; voice and calls — a soft musical double noted *tse-tse* while foraging from one treetop to another

#### ASHY MINIVET

##### 162. *Pericrocotus divaricatus* (Raffles)

Smaller than the Scarlet Minivet (18 cm in length).

A slim grey minivet with a long, graduated, black and white tail; wings black with a white patch; forehead white; posterior crown, nape, and broad line through the eyes black, rest of underparts white; female paler than the male and lacks the black on posterior crown; forehead faintly whitish; iris dark brown; bill and feet black.

The species breeds in eastern Asia and Japan, wintering south to Indonesia and Philippines. The nominate subspecies *P. d. divaricatus* (Raffles) has been recorded from the Andamans as an accidental winter vagrant.

Keeps in pairs or in small flocks in association with other minivets; food consists of insects.



*Pericrocotus flammeus andamanensis* Beavan. Female above and male below.

## SCARLET MINIVET

### 163. *Pericrocotus flammeus* (Forster)

About the size of the Bulbul (21 cm in length).

A lovely, slim, glossy black bird with scarlet red rump and underparts; two orange red bars on black wings; tail black above and tipped orange red, female similar but glossy black and scarlet replaced by greyish black and lemon yellow; iris brown, bill black, legs and feet black.

Widely distributed species throughout the greater part of the Oriental region, and is represented by five subspecies within the Indian limits, of which *P. f. andamanensis* Beavan is endemic in the Andaman Islands. It differs from the North Indian subspecies *P. f. speciosus* (Latham) in not having red on the outer webs of first three primaries in male, and first four primaries unspotted in female.

Common, frequents the crown of trees; moves in small flocks in mixed feeding parties; food consists of insects.

## Family 36. Irenidae

### FAIRY BLUEBIRD

### 164. *Irena puella* (Latham)

About the size of the Blackheaded Oriole or a little larger (27 cm in length).

A brilliantly coloured bird with metallic ultramarine blue above and velvety black below; female dull blue-green throughout; iris crimson, eye-rims pinkish; bill and legs black.

The species is widely distributed throughout South and Southeastern parts of the Oriental region. The nominate subspecies *I. p. puella* (Latham) occurs in the Andaman and Nicobar Islands as a resident.

Common; frequents fruiting trees particularly wild figs; moves in flocks in small parties; usually shy; food consists, exclusively, of wild fruits and berries; breeding season ranges from April to June and lays two eggs in twig's nest, placed in the fork of a sapling in thin jungle; voice and calls — a liquid, double noted whistle *weet, wet* repeated every few seconds.



*Irena puella puella* (Latham). Male below and female above.

## Family 37 Pycnonotidae

### BLACKHEADED BULBUL

#### 165. *Pycnonotus atriceps* (Temminck)

Somewhat smaller and slimmer than the Myna (18 cm in length).

A medium-sized, crestless olive-green bulbul with dusky olive-green head, tail long, graduated, olive with a yellow terminal band and a black subterminal band, chin and throat black; breast olive; rest of the plumage bright yellow; iris pale blue; bill slender and black; legs and feet plumbeous; sexes alike.

The species is distributed throughout South and Southeastern parts of the Oriental region and is represented by two subspecies within the Indian limits, of which *P. a. fuscoflavescens* (Hume) is endemic in the Andaman Islands.

Keeps in pairs; frequents trees and bushes in the forests as well as in the open countries; food mostly berries, also insects.

### REDWHISKERED BULBUL

#### 166. *Pycnonotus jocosus* (Linnaeus)

A little larger than the Blackheaded Bulbul (20 cm in length).

A small, hair-brown bird with a short black crest; cheek patch red and white; underparts white with a dark collar on upper breast and scarlet under tail-coverts; tail brown, with broad white tips; iris brown, bill black; legs and feet brown; sexes alike.

The species is distributed in most part of the Oriental region; represented by six subspecies within the Indian limits, of which *P. j. whistleri* Deignan is endemic in the Middle and South Andaman Islands. Introduced in the Nicobars.

Common, affects garden, keeps in pairs; food comprises berries, figs, nectar, spiders and insects; breeds during the monsoon and lays two or three eggs in the shallow cup-shaped nest composed of dry grass stems and the finest twigs, built in bushes and low shrubs.

### NICOBAR BULBUL

#### 167 *Hypsipetes nicobariensis* Moore

Same size as the Redwhiskered Bulbul (20 cm in length).

A crestless, dark brown bulbul with olive back; throat and breast whitish grey, faintly streaked with yellow; belly and under tail-coverts pale yellow, the

latter with brown centres; iris brown, bill deep brown, lower mandible and edges of upper dull yellow; legs and feet dark greenish brown, sexes alike.

Endemic in the Central Nicobar Islands.

Common, affects forests and gardens, keeps singly, in pairs or in small parties

### Family 38. Muscicapidae

#### OLIVE FLYCATCHER

#### 168. *Rhinomyias brunneata* (H. H. Slater)

About the size of the Sparrow (14 cm in length).

A small restless brown flycatcher with a rufous-brown tail; chin, throat and belly whitish, a pale brown band across breast; flanks brown, iris brown, bill, short, flat and broad at base, black on upper mandible, white on lower; legs yellowish flesh, sexes alike.

The species as a whole breeds in China and migrates in the southern countries during cold months. The subspecies *R. b. nicobarica* Richmond is a common winter visitor to southern Nicobar Islands. Its breeding range is unknown.

Affects forests, sometimes gardens and forest clearings; usually moves alone in bushes or low trees, perching on twigs from which catches flying insects in a typical flycatcher manner and return to the same perch.

#### BROWN FLYCATCHER

#### 169. *Muscicapa latirostris* Raffles

Same size as the Olivebacked Sunbird (14 cm in length).

A small, pale ashy brown flycatcher with large dark eyes surrounded by a whitish ring; underparts whitish, breast, and flank streaked and mottled ashy brown, throat glistening white; bill horny brown, base of the lower mandible fleshy yellow; legs and feet horny brown, sexes alike.

A partial migrating species with disjunct breeding range in eastern Siberia and also in northwestern Himalayas. Breeding range also includes cold mountains of the Western Ghats. Wintering in South and South-east Asian countries including the Andaman and Nicobar group of Islands.

Usually solitary; frequents mostly the lower branches of the trees; makes aerial sallies for dipterous insects from a dead branch, often returning to the same perch, voice and calls — a feeble *chik chik r-r*

### REDBREASTED FLYCATCHER

#### 170. *Muscicapa parva* Bechstein

Slightly smaller than the Brown Flycatcher (13 cm in length).

A tiny, restless pale brown flycatcher with a fulvous brown head, tail black and white; chin and throat orange-rufous; breast ashy; rest of underparts buff; female lacks the orange-rufous throat; underparts suffused with grey on the breast; iris hazel-brown, bill brownish black, paler on lower mandible; legs and feet blackish.

Species as a whole breeds in the temperate region of Eurasia, and migrates to the South and Southeast Asian countries. It is represented by four subspecies within the Indian limits, of which *M. p. albicilla* Pallas has been recorded from the Narcondam Island.

Uncommon, usually keeps singly; food consists of insects, chiefly mosquitoes and midges; voice and calls — a harsh *chit-rr*

### PARADISE FLYCATCHER

#### 171 *Terpsiphone paradisi* (Linnaeus)

About the size of the Nicobar Bulbul, but with very long streamers in male (20 cm in length).

Entire head, crest and throat glossy blue-black, a narrow rim round eye cobalt blue; rest of the plumage silvery white including wings and tail-ribbons, finely edged with black, in female and young male, crown blue black, crest shorter; rest of upperparts rufous; throat, nuchal collar and sides of head ashy, fading into white belly; ribbons absent.

The species is distributed throughout the Ethiopian, Palaearctic and Oriental regions; represented by four subspecies within the Indian limits, of which *T. p. nicobarica* Oates is endemic in the Nicobar Islands, rare in the South Andaman Island and perhaps a winter visitor

Common, frequents shady trees; usually seen in pairs but also found in family parties; food consists of winged insects; voice and calls — a harsh grating *che* note.

## BLACKNAPED FLYCATCHER

### 172. *Hypothymis azurea* (Boddaert)

Slightly larger than the Sparrow, but with a relatively long tail (16 cm in length).

An azure-blue flycatcher with a velvety patch on nape and a thin black crescent across the throat; rest of underparts blue, only slightly paler in the centre of the abdomen; axillaries blue; female lacks the black nape-patch, crown blue; remainder of upperparts brown, rest of underparts dull grey-blue fading to whitish on belly.

The species is distributed in most parts of the Oriental region. Within the Indian limits it is represented by four subspecies, of which *H. a. tytleri* (Beavan) is endemic in the Andamans, *H. a. idiochroa* (Oberholser) in the Car Nicobar and *H. a. nicobarica* (Bianchi) in rest of the Nicobar group of islands. The subspecies *idiochroa* (male), differs from *tytleri* in having the abdomen white; *nicobarica* (male) is smaller than *tytleri* with axillaries white instead of blue and differs from *idiochroa* in being smaller in wing.

Common, affects wooded areas; keeps singly or in pairs to taller trees but often frequents the undergrowth, food consists of winged insects, butterflies, etc., breeds during monsoon, nest is a neat, conical cup, sometimes with untidy loose materials dargling below; the clutch consists of three eggs; voice and calls — a high pitched *sweech* — *which* note.

## MANGROVE WHISTLER

### 173. *Pachycephala grisola* (Blyth)

Larger than the Sparrow (17 cm in length).

Upperparts olive-brown, crown ashy; underparts white with a pale grey-brown pectoral band, iris reddish brown, bill blackish brown, legs and feet greyish brown, sexes alike.

Widely distributed species throughout the South and Southeast Asian countries, including the Andamans.

Common, affects mangrove and other small trees; keeps singly or in pairs; food consists of insects; breeds during monsoon and lays two eggs in a cup-shaped nest attached by means of cobwebs to the twigs supporting it about three to four metres from the ground.

## PALEFOOTED BUSH WARBLER

### 174. *Cettia pallidipes* (Blanford)

Smaller than a sparrow (10 cm in length).

A small warbler with thin, narrow and pointed bill and rounded tail, above brown, supercilium pale brown, a darkish stripe through eye; below cream buff with the centre of belly white; sexes alike.

The species is distributed from West Himalaya through Burma to Indochinese subregion, south to eastern ghats and the Bay Islands. It is represented by two subspecies within the Indian limits, of which *C. p. osmastonii* (Hartert) is endemic in the South Andaman Island.

Affects dense undergrowth in high or secondary forests of the foothills; food consists of insects; breeds during wet season and lays four eggs in a ball-shaped nest composed of grass, placed in bushes overgrown with grass.

## STREAKED FANTAIL WARBLER

### 175. *Cisticola juncidis* (Rafinesque)

Same size as the Palefooted Bush Warbler (10 cm in length).

A minute, heavily streaked tawny warbler with a white-tipped fan-shaped tail, supercilium white; underparts whitish buff, darker on flanks; sexes alike.

Widely distributed species throughout the southern Europe, Africa and South and Southeast Asia, represented by four subspecies within the Indian limits, of which *C. j. malaya* Lynes occurs in the Nicobar Islands as a resident.

Affects grass fields, skulks among bushes and hunts near the ground; food consists of insects, voice and calls — rapid *zit-zit-zit* while excited.

## PALLAS'S GRASSHOPPER WARBLER

### 176. *Locustella certhiola* (Pallas)

Smaller than the Sparrow with thin bill (13 cm in length).

A small active olive-brown warbler with strong and dark shaft streaks on upper plumage, crown streaked grey and dark brown, supercilium pale whitish, tail rounded, with subterminal black spot; below buffy white, with fulvous breast, iris brown, bill fine dark brown to fleshy yellow; legs and feet fleshy white, sexes alike.

The species breeds in temperate regions of Asia and migrates to South and Southeast Asian countries during winter. It is represented by two subspecies within the Bay Islands. The darker and browner form *L. c. rubescens* Blyth occurs in Andamans, and paler and brighter rufous form *L. c. centralasiae* Suskin is found in both the groups of islands as scarce winter visitor.

Frequents swamps and rice field, foraging in low bushes and thickets; food consists of insects; voice and calls — *chi-chirr*

### STREAKED GRASSHOPPER WARBLER

177 *Locustella lanceolata* (Temminck)

Same size as the Pallas's Grasshopper Warbler (13 cm in length).

A small olive-brown warbler with broad black streaks on upperparts; faint pale yellowish supercilium, buffy white underparts, conspicuously streaked black on foreneck, breast and flanks; tail slightly pointed with paler edges and tips; iris brown, bill short, fine and dark; legs and feet fleshy white; sexes alike.

The species breeds in northeastern Russia and Siberia, and winters in southeastern part of the Oriental region including the Bay Islands.

Affects dense bush and grass, also in swampy reed beds; feeds on insects.

### THICKBILLED WARBLER

178. *Acrocephalus aëdon* (Pallas)

About the size of the Bulbul (20 cm in length).

A large plain fulvous olive-brown warbler whitish buff below, tinged with ochraceous on breast and under tail-coverts; iris hazel-brown to olive-brown; bill short, wide, horny brown above, yellowish flesh below; legs and feet plumbeous; sexes alike.

The species breeds in eastern temperate part of Asia and migrates to South and Southeast Asian countries during winter. The nominate subspecies *A. a. aëdon* is found in India including the Bay Islands during the cold months.

Frequents reeds and bushes in marshy places; food consists of insects; voice and calls — a loud harsh, quick repeated *tschuk, tschuk, tschuk*, and *chr-r* while hopping among the thickets.

## EASTERN GREAT REED WARBLER

### 179. *Acrocephalus orientalis* (Temminck & Schlegel)

Slightly smaller than the Thickbilled Warbler (19 cm in length).

A plain olive-brown warbler tinged with rufous on rump; lores and indistinct eyebrows whitish, underparts white with a warm buff tinge; flanks more buff; iris brown, upper mandible and tip of lower dark, rest of lower pinkish to yellowish flesh, mouth orange; legs and feet lead-grey; sexes alike.

The species breeds in eastern temperate part of Asia and migrates to South and Southeast Asian countries during winter including the Andaman and Great Nicobar Islands.

Frequents reeds and also low bushes; food consists of various larvae of insects; voice and calls — a harsh guttural *ke-kee, ke-kee*.

## INDIAN GREAT REED WARBLER

### 180. *Acrocephalus stentoreus* (Hemprich & Ehrenberg)

Same size as the Eastern Great Reed Warbler (19 cm in length).

A large plain olive-brown warbler with an indistinct fulvous buff line over the eye; wings and graduated tail dark brown, washed with olive-brown, chin and throat whitish; rest of lower plumage buffy white, paler about the abdomen; iris olive-brown, bill horny black above, lower mandible pinkish, darker at tip; legs and feet bluish horn, sexes alike.

The species extends from the Mediterranean belt through West to South and East Asia and is represented by three subspecies within the Indian subcontinent, of which *A. s. amyae* Baker occurs in the Andaman Islands in winter

Lives in reed beds; feeds on various larvae of insects; voice and calls — a harsh guttural *ke-kee, ke-kee*.

## ARCTIC LEAF WARBLER

### 181 *Phylloscopus borealis* (Blasius)

About the size of the Pallas's Grasshopper Warbler (12 cm in length).

A brownish green leaf warbler with a distinct yellowish supercilium and a dark streak through eyes; underparts dull white, with a faint yellowish wash; iris

brown; upper mandible dark brown with yellowish tomium, lower mandible orange-yellow to pale brown, legs and feet brownish yellow to brownish grey; sexes alike.

The species breeds in Arctic Norway, northern Russia and northern Siberia, and migrates to southeastern corner of the Oriental region. A single specimen of the nominate subspecies *P. b. borealis* (Blasius) has been recorded from the Andamans.

Solitary; usually keeps to trees and high bushes; feeds on insects; voice and calls — a loud and husky *tswee-ep* or *dz-dzit*.

## DUSKY LEAF WARBLER

### 182. *Phylloscopus fuscatus* (Blyth)

Same size as the Palefooted Bush Warbler (10 cm in length).

A restless little dusky olive-brown warbler with a prominent greyish supercilium and a dark streak through eye; underparts greyish white; flanks and under tail-coverts fulvous; sexes alike.

The species breeds throughout the greater part of Siberia and Central Asia and migrates in winter to most parts of the Oriental region. It is represented by three subspecies within the Indian limits, of which the nominate subspecies *P. f. fuscatus* (Blyth) and *P. f. mariae* Ripley occur in the Andaman Islands as winter visitors. The former differs from the latter in having the flanks fulvous, instead of ochraceous buff in the latter.

Usually found singly; forages in low bushes or ground, feeds on insects; voice and calls — a sharp clicking note *tschak, tschak*.

## PLAIN LEAF WARBLER

### 183. *Phylloscopus inornatus* (Blyth)

Same size as the Palefooted Bush Warbler (10 cm in length).

A tiny, greyish olive-green leaf warbler with a prominent yellowish supercilium; a faint greyish green coronal band; wings and tail dark brown, edged with greyish olive; wing-coverts with broad yellowish white tips, forming two wing bars; entire lower plumage dull white with a faint yellowish or greenish wash; iris dark brown; bill dark brown, base of lower mandible yellowish, legs greyish brown, sexes alike.

The species breeds throughout the greater part of Siberia and Central Asia, migrating southwards in winter. It is represented by three subspecies within Indian limits, of which the nominate subspecies *P. i. inornatus* (Blyth) was recorded once from the Narcondam Island in winter.

Uncommon, affects gardens, groves and open forests; food consists of insects; voice and calls — a sharp double noted *tiss-yip*.

#### LARGEBILLED LEAF WARBLER

##### 184. *Phylloscopus magnirostris* Blyth

Same as or slightly larger than the Plain Leaf Warbler (12 cm in length).

A large leaf warbler with dull greyish or brownish green upperparts, brighter on rump; wing-feathers brown, edged with olive-green and with a single conspicuous yellowish white wing-bar; tail brown; supercilium yellowish white; a dark eye streak; underparts yellowish white, suffused with olive-grey on the breast and flanks; iris hazel-brown; bill brown; legs and feet greyish brown; sexes alike.

The species breeds in the Himalaya, trans Himalaya and East Asia, and winters in South Asia including the Andaman Islands.

Usually keeps singly; affects the foliage canopy; food consists of insects; voice and calls — a distinct *dir-tee*.

#### PALELEGGED LEAF WARBLER

##### 185. *Phylloscopus tenellipes* Swinhoe

Same size as the Palefooted Bush Warbler (10 cm in length).

A diminutive olive-brown leaf warbler with a conspicuous buff supercilium contrasting with dark streaks through eyes; eye ring broken, underparts dull white, pale buff on flanks; wings with two faint buff bars; iris dark brown; bill above dark brown, below fleshy brown; legs and feet pale fleshy; sexes alike.

The species breeds in countries round the sea of Japan and migrates to Indochinese countries in winter. A single specimen from the Great Nicobar and another one from Narcondam Island have been recorded so far.

Affects deciduous forest; keeps to the undergrowth and the lower branches of trees; food consists of insects; voice and calls — a distinct metallic *tic-tic* note.

## DULL GREEN LEAF WARBLER

### 186. *Phylloscopus trochiloides* (Sundevall)

Same size as the Palefooted Bush Warbler (10 cm in length).

A slender dull olive-green leaf warbler brighter on the rump; supercilium, pale yellow contrasting with dark streaks through eyes; underparts dull white, washed with yellow; wings brown bearing a narrow whitish wing bar; tail brown, iris dark brown, bill brown above, yellowish horny below; legs and feet greyish brown, sexes alike.

A Palearctic species, migrates to South and Southeast Asian countries in winter and is represented by four subspecies within the Indian limits, of which the nominate subspecies *P. t. trochiloides* (Sundevall) occurs in the Andaman Islands.

Usually met with singly; keeps to the canopy of leafy trees, now and then coming down to shrubs; feeds on insects including small beetles and caterpillars.

## SIBERIAN BLUE CHAT

### 187 *Erithacus cyane* (Pallas)

About the size of the Sparrow, with rather long tarsus and slender bill (15 cm in length).

A forest-haunting chat or robin, slaty blue above, black and white below; lores and cheeks black; flanks bluish slate; in female olive-brown above, tinged with rufous on upper tail-coverts and tail; throat and centre of belly white; breast and flanks tinged with buff and mottled with pale brown, iris dark brown, upper mandible blackish horny, lower mandible livid white; legs and feet pale fleshy white.

The species breeds in Siberia and Japan, wintering in southern China, the Indochinese and Malaysian subregions, straggling to India. A single specimen of the nominate subspecies *E. c. cyane* (Pallas) was recorded from Chiria Tapu, South Andaman.

Keeps singly, mainly terrestrial; feeds on insects on damp ground under bushes; voice and calls — a low *chuck-chuck-chuck* repeated very quickly.

## BLUETHROAT

### 188. *Erithacus svecicus* (Linnaeus)

Size similar to that of the Siberian Blue Chat (15 cm in length).

An olive-brown robin-like bird with a cocked tail (which is raised and lowered) and bold buff eye brow; lores black, chin to upper breast blue with a

rufous and white central star; below the blue a double gorget of black and chestnut; rest of underparts whitish, rump and tail orange-chestnut, with blackish tip quite conspicuous in flight; female like male but lacks the chestnut and blue; buffy white below with a gorget of dark spots; iris brown, bill black; legs and feet blackish brown.

A Palaearctic species, wintering in Africa and West, South and South-eastern Asia. Within Indian limits it is represented by four subspecies, of which the nominate subspecies *E. s. svecicus* (Linnaeus) occurs in the Andamans.

Mainly terrestrial, keeps singly; feeds on insects on damp ground under bushes; moves about hopping on the ground with the typical cocked tail.

## SHAMA

### 189. *Copsychus malabaricus* (Scopoli)

About the size of the Bulbul, but with much longer tail (25 cm in length).

A familiar Magpie-Robin like bird with the head and back black; rump white; tail feathers marked with black and white; throat and upper breast glossy black, lower breast to vent white; flanks tinged with ferruginous; female similar but black replaced by grey; chin and throat less glossy; iris dark brown, bill black, legs and feet pale flesh.

The species ranges from India to Vietnam and Malaysian subregion. It is represented by four subspecies within the Indian subcontinent, of which *C. m. albiventris* (Blyth) is endemic in the Andamans.

Not uncommon, solitary in dense jungle; feeds on insects; breeds during May and June; the clutch consists of three to five eggs.

## MAGPIE-ROBIN

### 190. *Copsychus saularis* (Linnaeus)

Smaller than the Shama (20 cm in length).

A rather robin-like bird with the whole head, breast, wings, upper back and central tail feathers glossy black, remainder of lower plumage, outer tail feathers and a broad wing-bar white, flanks grey; belly washed with grey; female blackish brown glossed with green above and smoky grey from chin to breast; white parts distributed as in male.



*Copsychus malabaricus albiventris* (Blyth) Male.

The species inhabits the greater part of the Oriental region. It is represented by three subspecies within the Indian limits, of which *C. s. andamanensis* Hume is endemic in the South and Middle Andaman Islands.

Common near human habitation, orchards and gardens; keeps singly or in pairs; feeds mostly on insects; breeds during monsoon; lays three to five eggs in a cup-shaped nest composed of roots, grasses and fibres usually placed in holes in trees, roof of a house, bank or wall; voice and calls — a plaintive *swee-ee*.

## STONE CHAT

### 191 *Saxicola torquata* (Linnaeus)

About the size of a sparrow (13 cm in length).

A small bush chat, black above including the head, throat black; breast orange-rufous merging into paler rufous of the underparts; white patches on sides of neck, wings and vent; upper rump black and lower rufous; female rufous brown above, streaked with dark brown; rump pale rufous; pale eye-stripe; wing-patch white, less conspicuous; pale fulvous below; iris dark brown; bill and legs black.

A Palearctic and Ethiopian species, winters in South and Southeast Asian countries and within the Indian limits it is represented by four subspecies, of which *S. t. stejnegeri* (Parrot) occurs in the Andaman Islands.

Keeps singly or in pairs, perching on top of low bush, very restless and fairly shy, and incessantly flits its wings and tail; feeds on insects; voice and calls — a *wheat chat* note when excited.

## BLUE ROCK THRUSH

### 192. *Monticola solitarius* (Linnaeus)

About the size of a bulbul (23 cm in length).

A common rock thrush, uniform dark blue, brighter over the eyes the feathers of the upperparts with fulvous fringes, brown on breast and white on belly; wings and tail dark brown, washed with dark blue; female duller greyish brown above with faint shaft streaks and barred with blackish on rump; dirty white below, cross-banded with dark brown, iris brown, bill dark brown, legs and feet black.

The species breeds in the temperate parts of Eurasia and migrates to southern countries in winter. The subspecies *M. s. pandoo* (Sykes) breeds in the



*Zoothera citrina andamanensis* (Walden). Male.

Himalaya and trans Himalaya and in winter migrates south of its breeding range. Two specimens from Andamans and one from Car Nicobar Island have been recorded so far

Uncommon, keeps solitary, sits bold upright on a prominent solid perch, feeds generally on ground, but occasionally catches insects in air

### ORANGEHEADED GROUND THRUSH

#### 193. *Zoothera citrina* (Latham)

About the size of a myna (21 cm in length).

A skulking ground thrush with head, neck and underparts orange-chestnut as far as the vent, rest of the upperparts bluish grey; wings and tail brown, washed with bluish grey in the male and olive in the female; chin and throat whitish, outer tail-feathers lightly tipped white; vent and under tail-coverts white; iris dark brown; bill dark brown, base of the lower mandible flesh-coloured, legs fleshy pink.

Widely distributed species throughout the most part of the Oriental region and is represented by four subspecies within the Indian limits, of which *Z. c. andamanensis* (Walden) and *Z. c. albogularis* (Blyth) are endemic in the Andaman and Nicobar Islands respectively. The former differs from the latter in being paler in colour shade and chin and throat less white.

Fairly common; keeps singly or in pairs; affects damp and shady forest; usually shy and quiet but when disturbed flies up to a tall tree, sits there silent and motionless; food consists of insects, earthworms and berries; breeds during May–July in Andamans and lays three eggs in a broad solid cup-shaped nest made of moss and grass, and usually built on a small tree.

### SIBERIAN GROUND THRUSH

#### 194. *Zoothera sibirica* (Pallas)

Same as or slightly larger than the Orangeheaded Ground Thrush (22 cm in length).

A short-tailed thrush, entirely slaty black, with a conspicuous white supercilium and white tips to feathers of under tail-coverts and tail; female olive-brown above, with a narrow buff supercilium, throat buffish with a dark brown stripe on each side; breast buff, spotted with olive brown, belly white; iris dark brown, bill black in male and dark brown in female; legs and feet orange-yellow.

The species breeds in Siberia and Japan, wintering from Burma east through the Indochinese subregion to Malaya and Sumatra. The paler form *sibirica* (Pallas) with white abdomen breeds in Siberia and the darker form *davisoni* (Hume) with the abdomen entirely grey breeds in Japan. These two subspecies have been recorded from Andaman and Narcondam Islands respectively: they seem to be rare winter visitors.

Affects hill forests; keeps in small flocks; food consists of insects worms, fruits and berries; voice and calls — silent in winter

## DARK THRUSH

### 195. *Turdus obscurus* Gmelin

Same as or slightly larger than the Siberian Ground Thrush (23 cm in length).

A plain olive-brown bird with a broad white supercilium, throat white, streaked with grey in female, grey in male; breast and flanks pale fulvous brown; abdomen white; iris brown; bill brown, yellow at base of lower mandible; legs and feet yellowish brown to dark fleshy brown.

A Palearctic species, wintering in the Philippines, Taiwan, southern China, the Indochinese and Malaysian subregions and eastern India. A single specimen from the South Andaman Island has been recorded so far

Rare; affects open forest; food consists of insects; snails and berries; voice and calls — a thin pipit-like *zip-zip* when taking off

## Family 39. Motacillidae

### REDTHROATED PIPIT

### 196. *Anthus cervinus* (Pallas)

About the size of a sparrow, but with a much longer tail (15 cm in length).

A typical pipit, pale brown above, broadly streaked with dark brown, supercilium buffish; chin and throat whitish and with double whitish wing-bar; tail feathers dark brown, with outer rectrices white; remainder of lower plumage creamy buff, streaked with dark brown on breast; iris brown; bill horny brown, yellowish at base, darker at tip; legs and feet fleshy brown; sexes alike.

A Palearctic species, with a wide winter range from Africa to the Philippines. In the Bay Islands it is common but restricted to marshy grounds.

Usually seen in small flocks; never perches on trees, but is always seen on the ground unless in flight; food consists of small insects; voice and calls — a hoarse *teer* a clear *pee-ez* and a soft *teu*.

## BLYTH'S PIPIT

### 197 *Anthus godlewskii* (Taczanowski)

Same size as the Redthroated Pipit (15 cm in length).

Very similar to *A. novaeseelandiae* Gmelin (No. 198) except in having a shorter hind claw.

The species breeds in Northeastern and Central Asia, wintering in South and Southeast Asia including the Andaman Islands.

Rare; affects dry paddy fields, grass and fallow lands; keeps singly or in loose flocks; feeds on the ground insects.

## PADDYFIELD PIPIT

### 198. *Anthus novaeseelandiae* Gmelin

Slightly larger than the Blyth's Pipit (17 cm in length).

A slim, long-legged pipit, above dark brown, marked with fulvous; tail dark brown with white outer rectrices; supercilium pale fulvous; lower plumage buff, streaked with brown on breast; iris brown; bill horny brown, paler on lower mandible except tip; legs and feet brownish flesh; sexes alike.

Widely distributed species in the Northern Hemisphere, Australasia and New Zealand either breeding or wintering. It is represented by four subspecies within the Indian subcontinent, of which largest form *A. n. richardi* Vieillot, occurs in the Andaman Islands during winter

Usually keeps in pairs or small loose parties; affects swampy grass terrain and also dry paddy stubbles in the neighbourhood of water: runs rapidly on the grass, frequently stopping and raising its head to look for a grasshopper or other small ground insects; never perches on trees, and is always seen on the ground unless in flight; voice and calls — a loud, rapid and harsh *rreep*.

## PIED WAGTAIL

### 199. *Motacilla alba* Linnaeus

Between the Sparrow and the Bulbul in size (18 cm in length).

A dainty, slim, long-tailed bird with hind crown, neck and chest black; forehead, sides of the neck and ear-coverts white; back black, wings and tail marked with black and white; throat white and underparts suffused with grey; iris dark brown, bill, legs and feet black, sexes more or less alike.

A Palearctic species, wintering in tropical Africa and Asia. The subspecies *M. a. leucopsis* Gould visits Andamans during the winter; breeds in western and northern China, Korea and Amurland.

Keeps singly or in pairs; affects dry river beds, streams, road and cultivation; food consists of small insects and tiny molluscs; communal roosts in large flocks in reed beds; voice and calls – a sharp *chicheap* on flight.

## GREY WAGTAIL

### 200. *Motacilla cinerea* Tunstall

Same size as the Pied Wagtail (18 cm in length).

A forest-loving wagtail, bluish grey tinged with green above; supercilium white; wings dark brown, edged with yellowish white; tail black, margined with greenish, the three outer pairs of feathers entirely white; chin, throat and foreneck white; remainder of lower plumage pale yellow, brighter on vent; female lacks the brighter yellow on lower parts and with a buff throat; iris brown; bill horny grey; legs and feet fleshy brown.

A Palearctic species ranging from Scandinavia through the greater part of Europe to North and East Asia, migrates South to Africa, West Asia, India, Indochinese and Malayasian subregions as far as the Philippines in winter. The nominate subspecies *M. c. cinerea* Tunstall visits the Bay Islands in winter.

Common, keeps singly; generally found in dense patches of the forest; feeds entirely on small insects and tiny molluscs; assembles in large flocks for roosting in a swampy thicket in the evening; voice and calls – a soft *che-che-che*.

## YELLOW WAGTAIL

### 201. *Motacilla flava* Linnaeus

Same size as the Grey Wagtail (18 cm in length).

A slim long-tailed bird with dull olive-brown above; crown grey; nape dark slaty; wings dark brown, edged with fulvous; tail dark brown with white outer edges; cheeks and ear-coverts blackish, chin white or yellow; supercilium absent; remainder of lower plumage yellow sullied about the breast; female a little duller; iris brown, bill blackish brown, paler at base of lower mandible; legs and feet dark brown.

A Palaearctic species, wintering in tropical Africa and southwestern Asia. It is represented by seven subspecies within the Indian subcontinent, of which three subspecies namely *M. f. thunbergi* Billberg, *M. f. simillima* Hartert and *M. f. beema* (Sykes) are common winter visitors in the Bay Islands. The first one *thunbergi* is found in both the groups of islands, the second one *simillima* is restricted to the Andamans only and the third one *beema* to the Nicobars. Males of *thunbergi* and *simillima* differ from each other in having the ear-coverts blackish with indistinct supercilium in the former and the ear-coverts pale grey mixed with white and with a distinct black supercilium in the latter. Male *beema* is distinguished from *thunbergi* and *simillima* in having the dark grey ear-coverts, white chin and broad white supercilium.

Usually seen in small loose parties often intermixed with other wagtails in marshy meadows; feeds on the ground in damp grass spots; perches on low bushes and invariably roosts rather low in bushes, often in large communities; feeds almost entirely on small insects and small crustaceans when on the shore.

#### FOREST WAGTAIL

#### 202. *Motacilla indica* Gmelin

Same size as the Yellow Wagtail (18 cm in length).

Above olive-brown, creamy white below, with a black band across upper breast and other interrupted band on the lower breast; tail dark brown, with the outer rectrices white; supercilium white; wings blackish brown, boldly marked with yellowish white; iris brown, bill horny brown, paler at base of lower mandible; legs and feet horny black; sexes alike.

The species breeds in eastern Siberia and the hills of northern China, wintering in the Indochinese and Malaysian subregions, west to Burma and India. In the Andaman Islands it is restricted on shady forest glades and sandy stream beds.

Common, usually met with singly or in small parties; forages mostly on the ground, roosts in company with other wagtails in reed-beds in the evening; feeds on small slugs, snails, tiny worms and all kinds of insects; voice and calls – a soft *pink, pink*.

#### Family 40. Dicaeidae

#### PLAINCOLOURED FLOWERPECKER

#### 203. *Dicaeum concolor* Jerdon

Much smaller than a sparrow (8 cm in length).

A small restless bird, olive-green above; lores and supercilium white; wings and tail dark brown, edged with dull green, abdomen bright pale yellow,



*Nectarinia jugularis andamanica* (Hume). Male below and female above.

contrasting with the pale grey of the breast; iris brown, bill bluish grey; legs and feet plumbeous, sexes alike.

Widespread species in most part of the Oriental region and is represented by three subspecies within the Indian limits, of which *D. c. virescens* Hume is endemic in the Andamans.

Common, keeps in pairs; generally found haunting the tops of lofty trees, hunting for insects, voice and calls — a sharp *chip, chip, chip* in flight.

#### Family 41 Nectariniidae

##### OLIVEBACKED SUNBIRD

##### 204. *Nectarinia jugularis* Linnaeus

About the size of the White-Eye (10 cm in length).

A tiny restless bird, olive-brown above, pale yellow below; throat and breast metallic purple and blue-green, bordered on breast with a rusty band, pectoral tufts bright yellow; rest of underparts yellow; upperparts olive with a dark throat stripe (Non-breeding); female olive above, pale yellow below, brighter on belly; tail black with broad white tips in both sexes; iris brown, bill, legs and feet black.

A species of the eastern part of the Oriental region, extending east to the Australasian region. It is represented by three endemic subspecies in the Bay Islands, of which *N. j. andamanica* (Hume) occurs in the Andamans, *N. j. klossi* (Richmond) in the Nicobars and *N. j. proselia* (Oberholser) in the Car Nicobar Island. Male *klossi* differs from *andamanica* in having the upperparts olive, usually with metallic purple forecrown, abdomen bright yellow as against pale yellow; *proselia* is distinguished from *andamanica* and *klossi* in being smaller and having a shorter bill but similar to *klossi* in colour. Female *klossi* differs from *andamanica* and *proselia* in being brighter yellow below.

Common, affects forests, scrub and coastal mangroves; prefers nectar but also eats spider and insect; lays two eggs during January–February and May–July in an oval-shaped nest composed of grass; voice and calls — a feeble twittering in *proselia*.

##### YELLOWBACKED SUNBIRD

##### 205. *Aethopyga siparaja* (Raffles)

Same size as the Olivebacked Sunbird (10 cm in length).

A brilliantly coloured, restless bird with violet-purple crown, dark crimson back, bright yellow rump and long pointed violet-purple tail, chin, throat and



*Zosterops palpebrosa nicobarica* Blyth Male above and female below

breast scarlet crimson with metallic purple narrow malar streaks; rest of underparts dark ashy grey; female olive above, yellowish below; lateral tail feathers tipped with whitish, iris dark brown, bill blackish brown above, horny-brown below; legs and feet dark brown.

Widespread species in most part of the Oriental region and is represented by four subspecies within the Indian limits, of which *A. s. nicobarica* Hume is endemic in the Nicobars.

Common, usually found singly; frequents low flowering trees and shrubs, flits restlessly from flower to flower conveying ripe pollen to help in cross-pollination; feeds chiefly on nectar also insects, especially enjoys small spiders.

## Family 42. Zosteropidae

### WHITE-EYE

#### 206. *Zosterops palpebrosa* (Temminck)

Much smaller than the Sparrow (10 cm in length).

A minute, bright, greenish yellow bird with a conspicuous white ring round the eye; the concealed portions of the wings and tail dark brown; chin to upper breast and under tail-coverts bright yellow; rest of underparts greyish white; iris red-brown; bill above dark horny; legs and feet slaty grey; sexes alike.

Widely distributed species of the Indian, Indochinese and Malaysian subregions. It is represented by four subspecies within the Indian limits, of which *Z. p. nicobarica* Blyth, is endemic in the Bay Islands.

Common, keeps in flocks; entirely arboreal, prefers gardens and hill jungles close to cultivation; feeds chiefly on flower-nectar insects and their eggs and larvae; breeds during June and July and lays two eggs in a cup-shaped nest, composed of fine fibres, cotton, moss, etc., slung between two or more leafy twigs; voice and calls — a feeble, plaintive *cheer*.

## Family 43. Ploceidae

### WHITEBACKED MUNIA

#### 207. *Lonchura striata* (Linnaeus)

Same size as the Olivebacked Sunbird (10 cm in length).

A typical munia, chocolate-brown above; head, throat, breast, vent and under tail-coverts deep velvety black, wings and wedge-shaped tail blackish chocolate; lower breast and abdomen and a broad band across rump white; iris



*Lonchura striata fumigata* (Walden). Male and female.

reddish brown, bill black on upper mandible, bluish grey on lower legs and feet greenish, sexes alike.

Widespread species in most part of the Oriental region. It is represented by four subspecies within Indian subcontinent, of which *L. s. fumigata* (Walden) is endemic in the Andamans and *L. s. semistriata* (Hume) in the Nicobars. The former differs from the latter in having the upperparts unstreaked as against streaked.

Common, keeps in small flocks of 8 to 15 birds, usually met with in the open cultivated and scrubbed grazing land, food consists of grass seeds and insects; breeds during the monsoon in the Andamans; the clutch consists of three to five eggs; nest composed of grass; voice and calls — a feeble *chirrup*.

Family 44. Emberizidae  
YELLOWBREASTED BUNTING  
208. *Emberiza aureola* Pallas

Size that of a sparrow (15 cm in length).

A rather long-tailed, sparrow-like bird with a black head, remainder of upperparts and lesser wing-coverts dull chestnut; median wing-coverts white, greater wing-coverts maroon tipped with white; supercilium yellowish, tail dark brown with outer rectrices largely white; chin and upper throat blackish brown; lower throat and breast yellow, with a chestnut band between them; rest of underparts yellow, changing to buffy white on the vent; female brown, streaked with dark brown above; yellow, streaked and washed with brown below; iris brown; bill blackish brown above at tip, brownish flesh below; legs and feet brown.

The species breeds in Northern Asia wintering in Europe, China, South and Southeast Asia. Rare visitor to the Nicobars (a single specimen recorded).

Affects reeds, grass and cultivated fields; in winter it is entirely a seed-eater occasionally insects, usually keeps in flocks; roosts communally in bushes; voice and calls — a short *zipp* and a soft, trilling note *trssit*.

LITTLE BUNTING  
209. *Emberiza pusilla* Pallas

Slightly smaller than the Yellowbreasted Bunting (14 cm in length).

A little bunting with the upperparts rufous brown, streaked with black; sides of head and stripe along the middle of the crown rufous; a broad black

stripe on either side of the crown extending from the bill to the nape; underparts fulvous white with narrow black streaks on the breast, on the sides of the throat and on the flanks; female similar but duller; iris brown; bill horny brown, darker above, paler below; legs and feet yellowish brown.

A Palearctic species, wintering in South, East and Southeast Asia. A rare straggler in the Andaman Islands.

Affects reeds, grass, and scrub about cultivation in open country. In winter it is entirely a seed-berry-eater; voice and calls — a short *tsit* note.

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DR. BENOY KRISHNA TIKADER, born in Joydihi, a small village in the District of Khulna, now in Bangladesh, was educated at the University of Calcutta. Dr. Tikader was awarded the Ph.D. and D.Sc. Degree of the Calcutta University for his outstanding and meritorious contributions on spiders. He has been actively engaged in taxonomic and ecological research on spiders and scorpions of the Indian region for the past three decades. The author is also writing a *Handbook on Indian Spiders* which will give complete information about the Arachnida of India. Some other books by this author on various subjects are also under publication, viz., *Sea Shore Animals of Andaman and Nicobar Islands* (with colour illustrations), *Glimpses of Andaman and Nicobar Islands*, *Beautiful Shells of Andaman and Nicobar Sea and their Utility for Cottage Industry*, *Endemic Birds of India* and *Handbook of Indian Testudines*. Dr. Tikader has a hobby of wildlife and nature photography and majority of the photographs which will be used in the above mentioned books are by him.

Dr. Tikader is at present the Director of the Zoological Survey of India and is a member of the Indian Board for Wildlife.

